# 1996 State-by-State Assessment of Low-Level Radioactive Wastes Received at Commercial Disposal Sites

National Low-Level Waste Management Program

Ronald L. Fuchs

September 1997

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### 1996 STATE-BY-STATE ASSESSMENT OF LOW-LEVEL RADIOACTIVE WASTES RECEIVED AT COMMERCIAL DISPOSAL SITES

September 1997

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Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Restoration
and Waste Management
Under DOE Idaho Operations Office
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#### **ABSTRACT**

Each year the National Low-Level Waste Management Program publishes a state-by-state assessment report. This report provides both national and state-specific disposal data on low-level radioactive waste commercially disposed in the United States. Data in this report are categorized according to disposal site, generator category, waste class, volumes, and radionuclide activity. Included in this report are tables showing the distribution of waste by state for 1996 and a comparison of waste volumes and radioactivity by state for 1992 through 1996; also included is a list of all commercial nuclear power reactors in the United States as of December 31, 1996. This report distinguishes between low-level radioactive waste shipped directly for disposal by generators and waste that was handled by an intermediary, a reporting change introduced in the 1988 state-by-state report.

#### **NOTICE**

The State-by-State assessment documents for 1993 through 1996 have been made available on the Program's Internet home page at "<a href="http://www.inel.gov/national/national.html">http://www.inel.gov/national/national.html</a>" for your convenience. As of January 1, 1997 these data are presented on the MIMS system at "<a href="http://mims.inel.gov">http://mims.inel.gov</a>" through current month.

The information presented in this report is meant to be informative to the reader and provide accurate disposal figures for the commercial low-level radioactive waste being shipped for disposal within the United States. The disposal volumes in this report are presented using cubic foot (ft<sup>3</sup>) measurement, if the reader prefers cubic meters, divide the reported ft<sup>3</sup> number by 35.314. In this year's document, additional comparison graphs for the years 1987 through 1996 have been provided, for your convenience, at the national, compact region, and state levels.

Comments and suggestions as to how this document may better address your needs for information on this subject are welcomed. Comments may be sent to the address listed below:

National Low-Level Waste Management Program Lockheed Martin Idaho Technologies Company P.O. Box 1625 Idaho Falls, ID 83415-2420

or

Email "sysdemo@inel.gov"

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# 1996 STATE-BY-STATE ASSESSMENT OF LOW-LEVEL RADIOACTIVE WASTES RECEIVED AT COMMERCIAL DISPOSAL SITES

#### 1. INTRODUCTION

The National Low-Level Waste Management Program (NLLWMP) has published 18 annual state-by-state assessment reports. These reports provide both national and state-specific disposal data that assist states in the management of low-level radioactive waste (LLW), as specified in the Low-Level Radioactive Waste Policy Act (Public Law 96-573) and the Low-Level Radioactive Waste Policy Amendments Act of 1985 [(LLRWPAA) Public Law 99-240].

Over the past 18 years every state has disposed of some quantity of LLW. This waste is generated from a variety of commercial sources, such as

- Government and industrial research
- Generation of electrical power
- Medical diagnostic and therapeutic services
- Various manufacturing processes.

Before publishing the first state-by-state report in 1979, researchers studied the quantities and radioactivity levels of LLW disposed of in the United States. The first report was designed to assist states in extrapolating accurate estimates of disposal rates by separating wastes into four broad categories:

- Government
- Industrial
- Institutional
- Utility.

In 1983, the categories were further refined by establishing more specific categories for Institutional waste. This resulted in five categories, as follows:

- Academic
- Government
- Industrial
- Medical
- Utility.

Currently, commercial disposal sites report actual volumes disposed of for each of these five categories.

The volume of LLW disposed of at commercial disposal sites exceeded 3.7 million cubic feet in 1980. This represents the highest reported annual volume of LLW disposed of during the history of the state-by-state assessment documents. From 1981 through 1990, the volume of LLW being disposed of at commercial disposal sites declined. In 1991 and 1992, the reported volume of LLW received for disposal at commercial sites showed a slight increase. This increase is believed to be the result of the anticipated increase in disposal costs and, in 1992, the anticipated closure on January 1, 1993, of the Barnwell, South Carolina, Beatty, Nevada, and Richland, Washington disposal facilities to "out-of-region" generators. On December 31, 1992, the Beatty, Nevada, site stopped receiving LLW for disposal altogether, and the Richland, Washington, site restricted the LLW received for disposal to the Northwest and Rocky Mountain compact states. The Barnwell, South Carolina, disposal facility continued to receive LLW for disposal by the member states of the Southeast compact and those compact states that had contracts with the Southeast commission through June 1994. On July 1, 1994, the Barnwell site restricted disposal to only member states of the Southeast LLW compact. South Carolina withdrew from the Southeast compact and on July 1, 1995, the Barnwell site began accepting LLW for disposal from all states, with the exception of North Carolina.

In summary, as of July 1, 1996, the only state that is being denied LLW disposal access is North Carolina. The Barnwell, South Carolina, LLW disposal facility is operated by Chem-Nuclear Systems, LLC and is accepting LLW shipments for disposal from all states excluding North Carolina. The Richland, Washington, commercial LLW disposal facility is operated by US Ecology, Inc. and accepts LLW shipments for disposal from only member states of the Northwest and Rocky Mountain compact regions.

The reported 1996 disposal volume was 422,013 cubic feet. A list of the 1996 LLW volumes and radioactivity reported as disposed by state is provided in Table 1. Only five states including Idaho, Montana, North Carolina, Puerto Rico, which is treated as a state under the LLRWPAA, and South Dakota reported no LLW shipments in 1996.

The first state-by-state assessment used several data sources. These included U.S. Nuclear Regulatory Commission (NRC) records on nuclear power plant waste shipments,<sup>1</sup> the U.S. Department of Energy Solid Waste Information Management Systems<sup>2</sup> for information on defense waste shipped to commercial sites, and the University of Maryland (at Baltimore) studies on national institutional waste generation.<sup>3,4</sup> Since its initial publication, this report has been modified and expanded as more detailed state information became available from the disposal sites. Results from generator surveys and feedback from state officials continue to improve understanding of the sources of LLW and the quality of the data.

Data in this report has been reviewed by representatives of individual states' radiation control programs prior to release. A list of state radiation control program representatives is provided for the reader's convenience in Appendix C.

**Table 1.** 1996 waste distribution by state as reported by disposal site operators.

States	Volume (ft <sup>3</sup> )	Activity (curies)
Alabama	9,267.12	22,281.20
Alaska	10.20	603.00
Arizona	9,329.27	16.09
Arkansas	571.42	303.22
Army Out U.S.a	65.50	133.46
California	12,070.78	3,474.76
Colorado	4,671.74	76.65
Connecticut	10,920.12	3,088.11
Delaware	127.16	5.61
Dis Of Columbia	164.80	.47
Florida	6,220.33	1,417.70
Georgia	13,405.88	122,519.67
Hawaii	1,572.03	1.06
Idaho	0	0
Illinois	51,771.22	57,328.05
Indiana	328.98	9.61
Iowa	3,639.22	552.04
Kansas	1,185.15	3,995.76
Kentucky	441.83	462.29
Louisiana	5,377.80	799.47
Maine	3,499.40	477.12
Maryland	3,391.05	349.13
Massachusetts	10,756.09	16,627.51
Michigan	24,951.04	41,906.96
Minnesota	3,215.22	1,406.00
Mississippi	5,600.72	2,817.54
Missouri	2,916.99	150.40
Montana	0	0
Nebraska	5,013.28	32,750.85
Nevada	117.70	2.35
New Hampshire	2.32	<.01
New Jersey	15,805.16	906.65

a. Army Out U.S. = U.S. owned military bases located outside the continental United States.

 Table 1. (continued).

States	Volume (ft <sup>3</sup> )	Activity (curies)
New Mexico	49.90	3.89
New York	16,228.39	1,312.36
North Carolina	0	0
North Dakota	4.10	.03
Ohio	7,090.83	50,021.21
Oklahoma	151.70	.43
Oregon	52,082.40	356.74
Pennsylvania	24,154.38	71,900.54
Puerto Rico	0	0
Rhode Island	91.13	.29
South Carolina	10,273.10	2,347.13
South Dakota	0	0
Tennessee	41,312.95	644.86
Texas	4,886.60	3,941.45
Utah	4,924.50	.26
Vermont	562.60	45.77
Virginia	17,663.13	10,375.11
Washington	33,696.09	630.63
West Virginia	34.77	.11
Wisconsin	2,396.65	153.07
Wyoming	.50	13.21
TOTAL	422,013.24	456,209.81

#### 2. 1996 REPORTING METHOD AND SUMMARY

The data for the 1996 state-by-state assessment report were developed from the Department of Energy's Manifest Information Management System with data originating from the LLW shipment manifests recorded at the two commercial LLW disposal sites located at Barnwell, South Carolina; and Richland, Washington.<sup>a,b</sup> This information is presented in Appendix A with expanded graphics.

Reports generated for 1979 through 1987 in this series have attributed waste that was processed or consolidated into larger shipments at intermediate waste management facilities to the states in which those facilities were located. The report generated for 1988 and subsequent years attributes waste volume, activity, and generator type by source to the original state in which it was generated, even where brokered shipments included waste originally generated in more than one state. This change in reporting method was made possible because of changes in the manifesting requirements for brokered shipments at the sited states. The waste volumes for states such as Tennessee, where a significant volume of waste is processed through several large waste management facilities, were the most notably affected.

Due to the change in reporting methods, which began in 1988, it became necessary to make a distinction between LLW shipments shipped directly from the generator to the disposal site and those LLW shipments that were shipped through an intermediary. The new reporting method required intermediary waste handlers to associate LLW by volume and activity to the generator and state of origin. This requirement, however, does not require an association of generator and state for information relating to the specific waste radionuclide or waste classification. For this reason, two classifications of waste shipments have been maintained in this report since 1988:

- Nondirect: Shipments from the generator to the disposal facility through an intermediary
- Direct: Shipments that did not involve an intermediary.

In 1996, approximately 45%, or 185,285 cubic feet, of all LLW shipped for disposal was categorized as Nondirect.

The data are arranged to allow the reader to locate information by area of interest, ranging from total commercial LLW disposed within the United States to LLW disposed by a specific state.

The information presented covers the distribution of LLW by

- Volume
- Activity
- Waste classification
- Waste generator type
- Disposal site
- Waste that has been subject to intermediate handling.

a. Data obtained from Chem-Nuclear Systems, LLC, for the Barnwell, South Carolina, LLW disposal site through subcontract number C87-131476-M7.

b. Data obtained from U.S. Ecology, Inc., for the LLW disposal sites located in Beatty, Nevada, and Richland, Washington, through subcontract number C91-133053-M3.

Waste generator categories are

- Academic
- Government
- Industrial
- Medical
- Utility.

The utility category includes commercial nuclear power reactors. The academic category includes university hospitals and university medical and nonmedical research facilities. Medical generators include hospitals and clinics, research facilities, and private medical offices. The industrial category encompasses private entities such as research and development companies, manufacturers, nondestructive testing, mining, fuel fabrication facilities, and radiopharmaceutical manufacturers. The government category includes state and federal agencies.

Appendix B contains a comparison of LLW disposal volumes by state for the most recent 5-year period, a comparison of the radioactivity of LLW disposed by State for the most recent 5-year period, and a complete list of the commercial nuclear power reactors located in the United States as of December 31, 1996.

A review of the data found in this report will show that in 1996 commercial LLW disposal facilities received a total volume of 422,104 cubic feet of waste containing an activity of 456,211 curies. Waste distribution by disposal site is presented in Table 2; Tables 3 and 4 provide information concerning the typical radionuclide and waste forms associated with commercial LLW.

**Table 2.** Distribution of low-level radioactive waste received at disposal sites in 1996.

Site	Volume (ft <sup>3</sup> )	Percent of Total	Activity (curies)	Percent of Total
Barnwell	325,561	77	455,214	99.8
Richland	96,453	23	997	.2
Total	422,104	100	456,211	100

**Table 3.** Radionuclides received through direct and nondirect low-level radioactive waste shipments at commercial disposal sites in 1996. The top 20 radionuclides are listed from highest to lowest activity levels (based on curie count).

Nondirect	Utility	Academic	Medical	Industrial	Government
H-3	Fe-55	Co-60	Cs-137	Co-60	H-3
Fe-55	Co-60	H-3	Au-195	H-3	Fe-55
Co-60	Ni-63	C-14	Co-57	Fe-55	Co-60
Zn-65	Mn-54	S-35	Ra-226	Cs-137	Ni-63
Ni-63	Hf-181	Cr-51		Ni-63	Co-58
Mn-54	Cs-137	I-125		Sr-90	Mn-54
Cs-137	Co-58	Fe-59		C-14	C-14
C-14	Cr-51	Ca-45		Ni-59	Zn-65
Co-58	Zn-65	Zn-65		Mn-54	Ni-59
Cr-51	Cs-134	P-32		Pu-241	S-35
Cs-134	H-3	Ni-63		Zn-65	Cs-137
Sr-89	Sb-125	Na-22		Ra-226	Sr-90
Zr-95	C-14	Co-57		Sb-125	Nb-94
Nb-95	Fe-59	Cl-36		Cr-51	Cr-51
Ag-110m	Ag-110m	U-238		Ag-110m	I-125
Fe-59	Ni-59	Y-90		U-238	Ag-110
Sb-125	Be-7	Am-241		Am-241	Fe-59
S-35	Co-57	Eu-155		Tc-99	Cl-36
Ce-144	Ce-144	Sn-113		Ba-137m	Se-75
Kr-85	Ba-140	Tc-99m		Te-125m	Co-57

#### Academic

Compacted trash or solids Institutional laboratory or biological waste Absorbed liquids Animal carcasses

#### Government

Compacted trash or solids Contaminated plant hardware Absorbed liquids

#### **Industrial**

Depleted uranium Compacted trash or solids Contaminated plant hardware Absorbed liquids Sealed sources

#### Medical

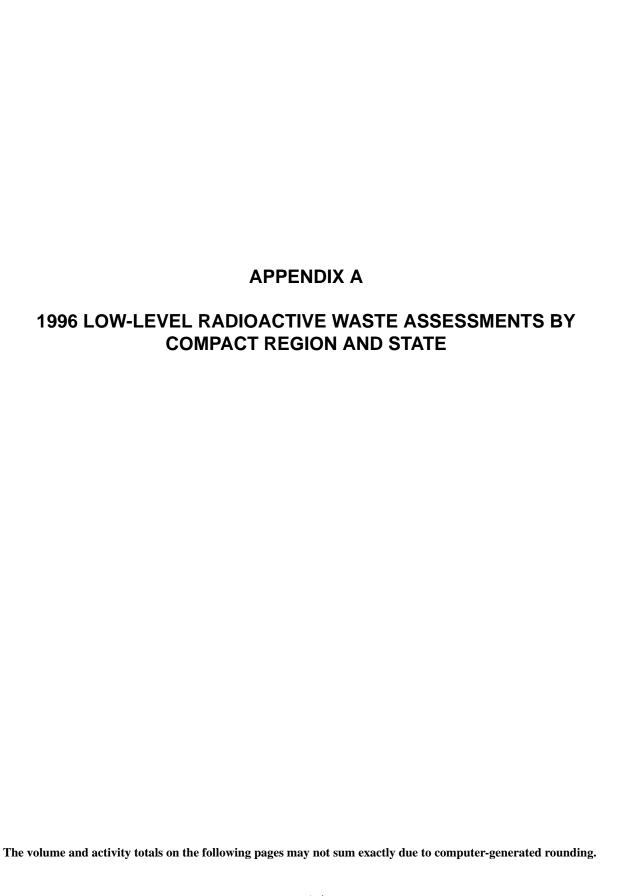
Compacted trash or solids Institutional laboratory or biological waste Absorbed liquids Sealed sources

#### **Utilities**

Spent resins
Evaporator bottoms and concentrated waste
Filter sludge
Dry compressible waste
Irradiated components
Contaminated plant hardware

#### 3. REFERENCES

- 1. U.S. Nuclear Regulatory Commission, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light Water Cooled Nuclear Power Plants," Regulatory Guide 1.21, Revision 1, June 1974.
- 2. U.S. Department of Energy, Washington, D.C., "Solid Waste Information Management System (SWIMS)-Actual Solid Waste Generated for Fiscal Year 1979," February 22, 1980.
- 3. R. L. Anderson, L. R. Cooley, T. J. Beck, C. S. Strauss, *Institutional Radioactive Waste*, NUREG/CR-0028, Radiation Safety Office, University of Maryland at Baltimore, March 1978.
- 4. T. J. Beck, L. R. Cooley, M. R. McCampbell, *Institutional Radioactive Wastes-1977*, Radiation Safety Office, University of Maryland at Baltimore (draft), June 1979.
- Conference of Radiation Control Program Directors, Inc., Low-Level Radioactive Waste Management Survey Summary, 1984.



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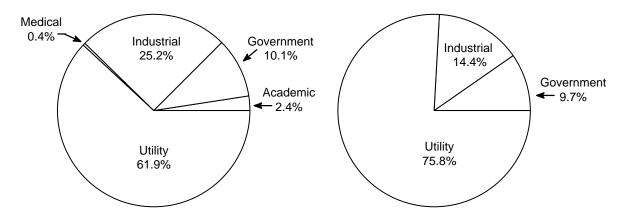
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# UNITED STATES Low-Level Radioactive Wastes Received at Commercial Disposal Sites<sup>a</sup> in 1996

Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	9,994.41	48.54
Government	42,623.44	44,368.74
Industrial	106,562.83	65,833.52
Medical	1,628.52	8.83
Utility	261,204.04	345,950.19
Total	422,013.24	456,209.81

# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

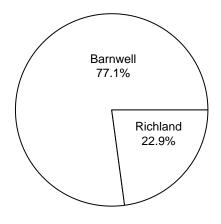


a. Data in this and all succeeding pages in Appendix A were provided by the Department of Energy's Manifest Information Management System. Data originated with Chem Nuclear Systems, LLC and U.S. Ecology, Inc.

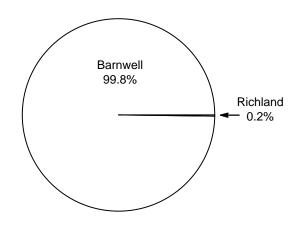
# UNITED STATES Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	325,560.62	455,213.81
Richland	96,452.62	997.01
Total	422,103.24	456,210.82

## VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

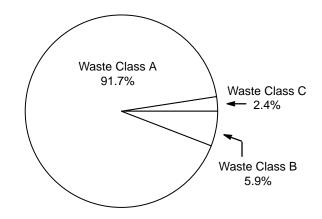


# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



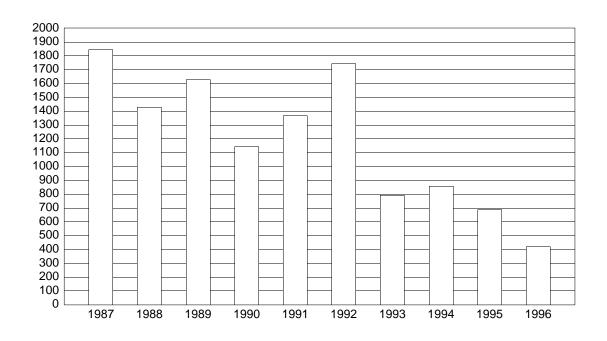
#### VOLUME PERCENTAGE BY WASTE CLASS UNITED STATES TOTAL (Percentages <.1% are not displayed)

United States Total Distribution By Waste Class	Volume (ft <sup>3</sup> )
A B	387,097.38 24,889.90
C	10,115.96
Total	422,103.24
Total Activity (curies)	456,210.82

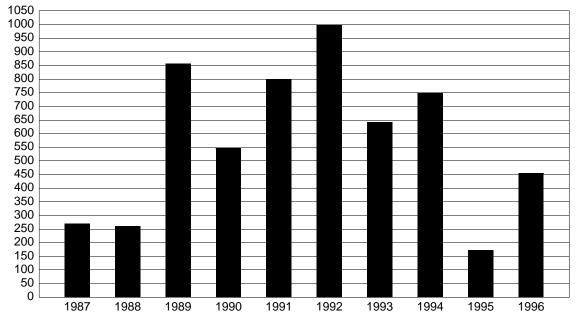


#### UNITED STATES Comparison By Year

#### **Volumes in Cubic Feet x 1000**





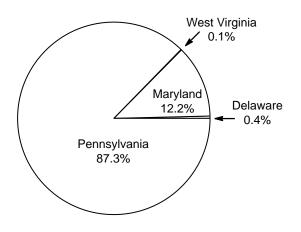


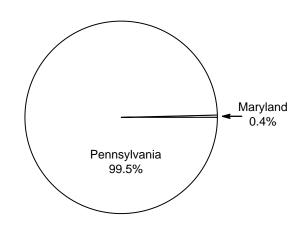
#### APPALACHIAN COMPACT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

States	Volume (ft <sup>3</sup> )	Activity (curies)
Delaware	127.16	5.61
Maryland	3,391.05	349.13
Pennsylvania	24,154.38	71,900.54
West Virginia	34.77	11_
Total	27,707.36	72,255.39

# VOLUME PERCENTAGE BY STATE (Percentages <.1% are not displayed)

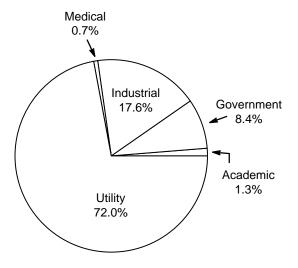
# ACTIVITY PERCENTAGE BY STATE (Percentages <.1% are not displayed)

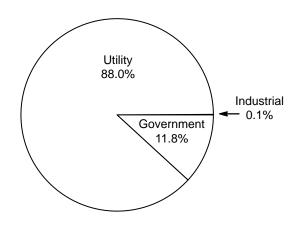




# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

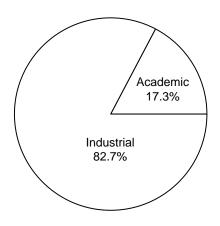




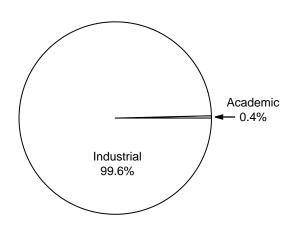
#### DELAWARE Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	22.05	.02
Industrial	105.11	5.59
Total	127.16	5.61

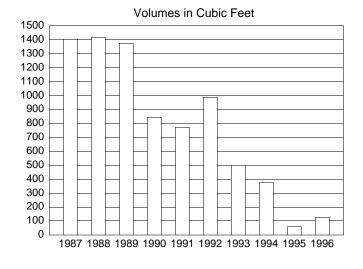
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

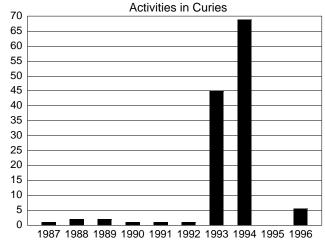


# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



#### **COMPARISON BY YEAR**



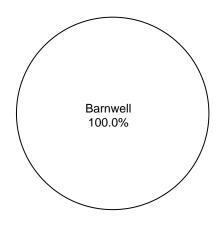


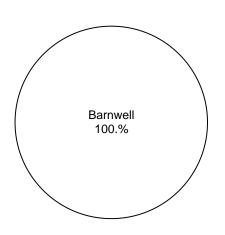
#### DELAWARE Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	127.16	5.61
Total	127.16	5.61

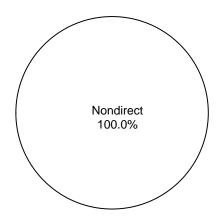
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)





VOLUME PERCENTAGE BY WASTE CLASS FOR DIRECT SHIPMENTS AND TOTAL NONDIRECT VOLUME PERCENTAGE (Percentages <.1% are not displayed)

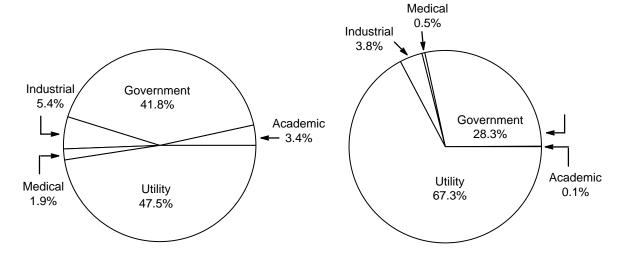


MARYLAND Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

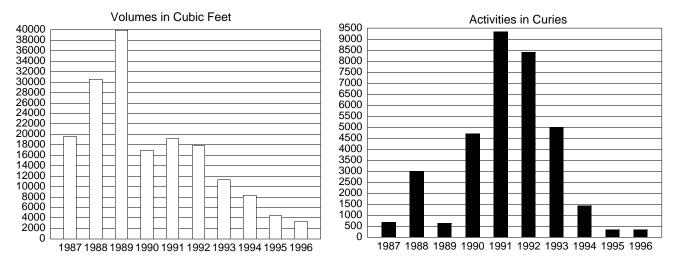
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	115.50	0.34
Government	1,415.90	98.76
Industrial	183.55	13.42
Medical	66.40	1.58
Utility	1,609.70	235.02
Total	3,391.05	349.13

# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

## ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



#### **COMPARISON BY YEAR**



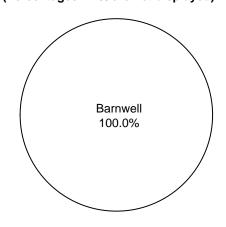
#### MARYLAND Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	3,391.05	349.13
Total	3,391.05	349.13

# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

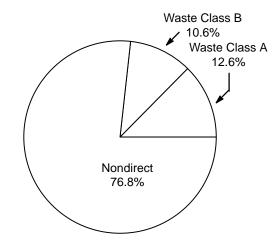
# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



VOLUME PERCENTAGE BY WASTE CLASS FOR DIRECT SHIPMENTS AND TOTAL NONDIRECT VOLUME PERCENTAGE (Percentages <.1% are not displayed)

Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	428.60
В	360.90
C	0
Total	789.50
Nondirect Shipments	2,601.55
Total Volume	3,391.05
Total Activity (curies)	349.13

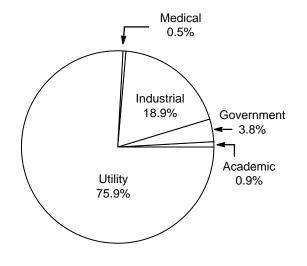


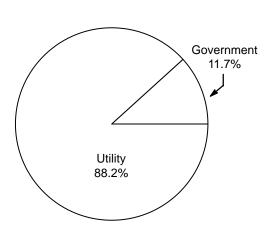
#### PENNSYLVANIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Generator	Volume	Activity
Category	$(ft^3)$	(curies)
Academic	220.30	8.43
Government	911.28	8,429.07
Industrial	4,570.61	62.89
Medical	125.51	0.47
Utility	18,326.68	63,399.68
Total	24,154.38	71,900.54

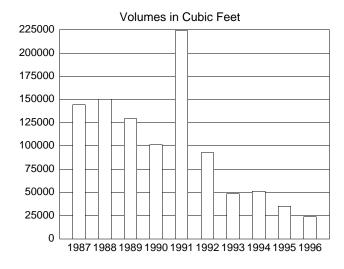
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

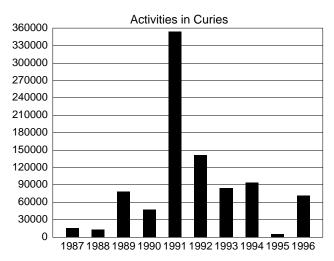
## ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





#### **COMPARISON BY YEAR**





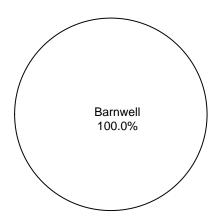
#### PENNSYLVANIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	24,154.38	71,900.54
Total	24,154.38	71,900.54

# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

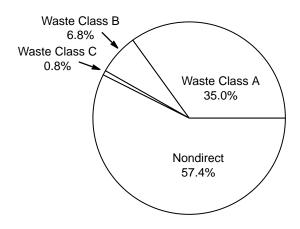
# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



#### VOLUME PERCENTAGE BY WASTE CLASS FOR DIRECT SHIPMENTS AND TOTAL NONDIRECT VOLUME PERCENTAGE (Percentages <.1% are not displayed)

Direct Shipment	Volume
Waste Class	$(ft^3)$
<u> </u>	
A	8,461.00
В	1,634.80
C	198.70
Total	10,294.50
Nondirect Shipments	13,859.80
Total Volume	24,154.38
Total Activity (curies)	71,900.54



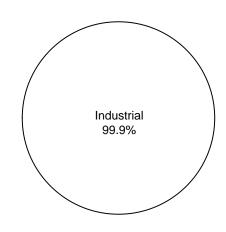
#### WEST VIRGINIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Government Industrial	8.14 26.63	<.1 .11
Total	34.77	.11

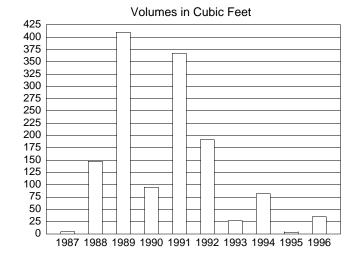
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

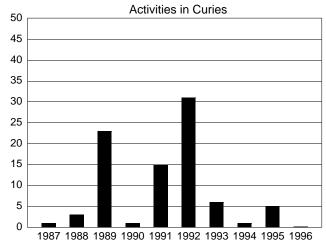
# Government 23.4% Industrial 76.6%

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



#### **COMPARISON BY YEAR**





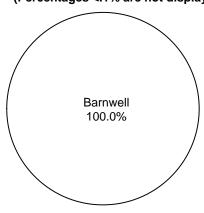
#### WEST VIRGINIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	34.77	.11
Total	34.77	.11

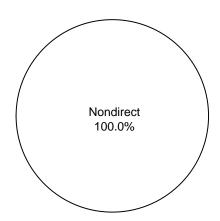
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



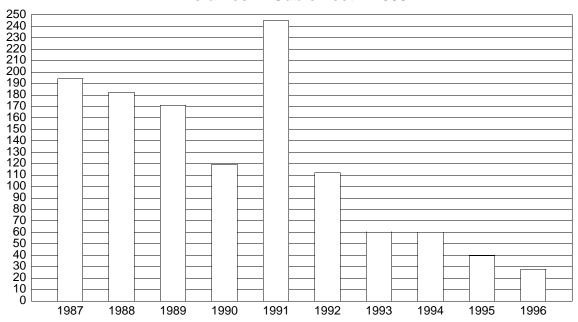
VOLUME PERCENTAGE BY WASTE CLASS FOR DIRECT SHIPMENTS AND TOTAL NONDIRECT VOLUME PERCENTAGE (Percentages <.1% are not displayed)



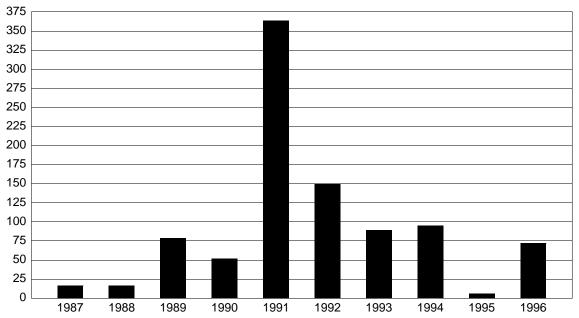
# APPALACHIAN COMPACT Comparison By Year

NOTE: The years 1987 through 1996 include all states currently being reported in the Appalachian compact region.

#### **Volumes in Cubic Feet x 1000**



#### **Activities in Curies x 1000**

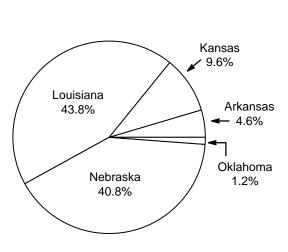


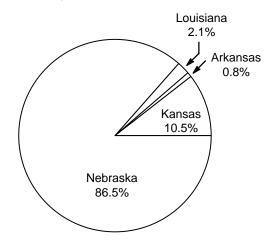
#### CENTRAL COMPACT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

States	Volume (ft <sup>3</sup> )	Activity (curies)
Arkansas	571.42	303.22
Kansas	1,185.15	3,995.76
Louisiana	5,377.80	799.47
Nebraska	5,013.28	32,750.85
Oklahoma	151.70	.43
Total	12,299.35	37,849.73

# VOLUME PERCENTAGE BY STATE (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY STATE (Percentages <.1% are not displayed)





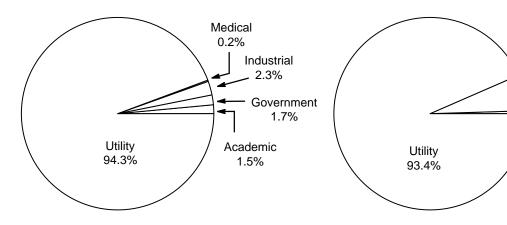
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

Industrial ← 6.0%

Government

0.5%

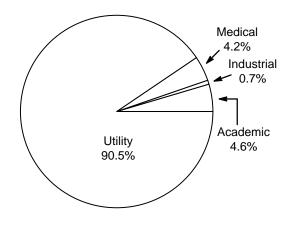


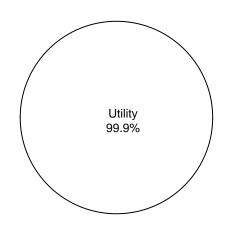
#### ARKANSAS Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	26.10	.08
Industrial	4.12	.20
Medical	23.90	<.01
Utility	517.30	302.94
Total	571.42	303.22

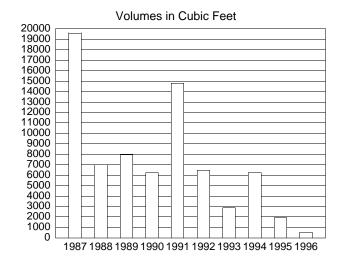
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

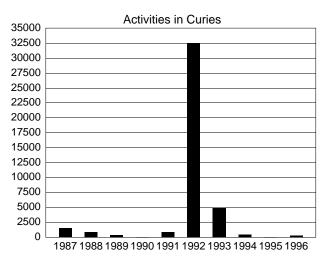
# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





#### **COMPARISON BY YEAR**



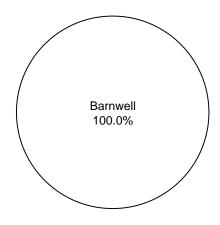


#### ARKANSAS Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

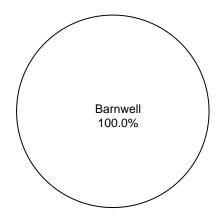
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	571.42	303.22
Total	571.42	303.22

# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

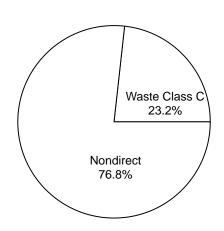
ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	0
В	0
C	132.40
Total	132.40
Nondirect Shipments	439.02
Total Volume	571.42
Total Activity (curies)	303.22



VOLUME PERCENTAGE BY WASTE CLASS FOR DIRECT SHIPMENTS AND TOTAL NONDIRECT VOLUME PERCENTAGE (Percentages <.1% are not displayed)

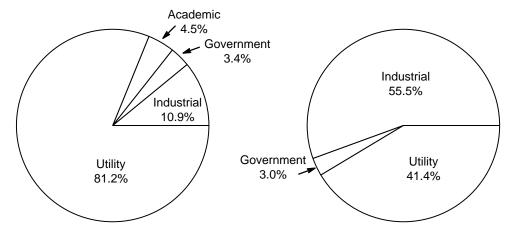


KANSAS Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

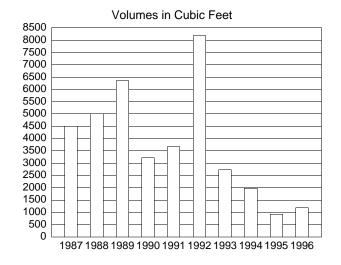
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	53.68	.28
Government	40.70	120.29
Industrial	128.67	2,216.62
Utility	962.10	1,658.57
Total	1,185.15	3,995.76

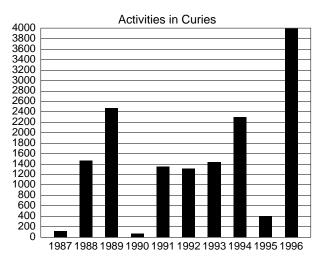
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

## ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



#### **COMPARISON BY YEAR**

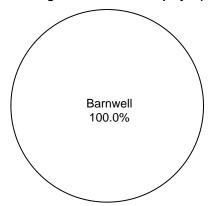




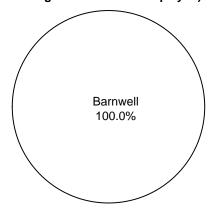
#### KANSAS Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	1,185.15	3,995.76
Total	1,185.15	3,995.76

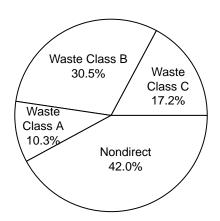
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment	Volume
Waste Class	$(ft^3)$
A	122.47
В	360.90
C	203.70
Total	687.07
Nondirect Shipments	498.08
Total Volume	1,185.15
Total Activity (curies)	3,995.76

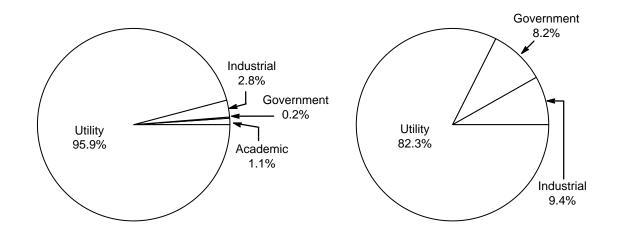


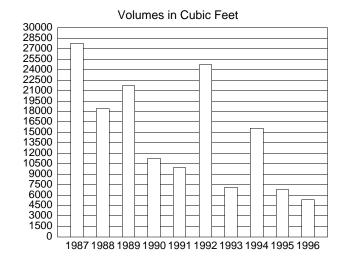
LOUISIANA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

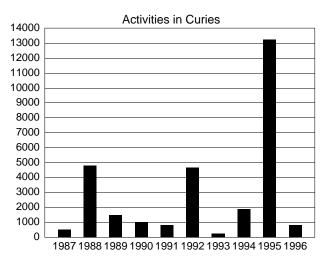
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	57.90	0.05
Government	11.50	65.57
Industrial	152.00	75.25
Utility	5,156.40	658.60
Total	5,377.80	799.47

**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







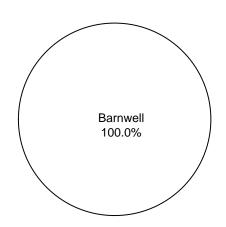
#### LOUISIANA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)	
Barnwell	5,377.80	799.47	
Total	5,377.80	799.47	

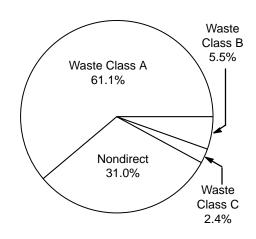
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	3,285.40
В	294.60
C	132.40
Total	3,712.40
Nondirect Shipments	1,665.40
Total Volume	5,377.80
Total Activity (curies)	799.47

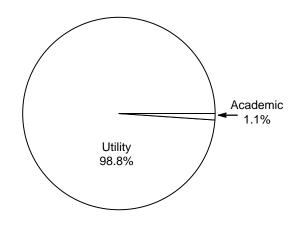


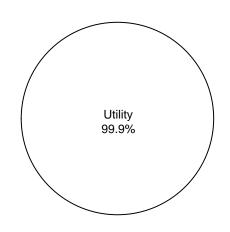
NEBRASKA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

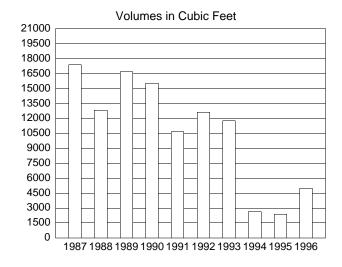
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	52.58	0.14
Government	4.00	7.34
Industrial	.30	<.01
Utility	4,956.40	32,743.38
Total	5,013.28	32,750.85

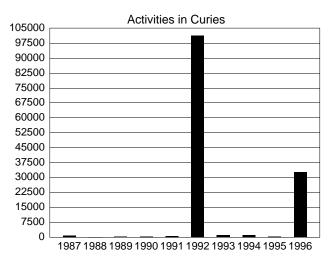
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









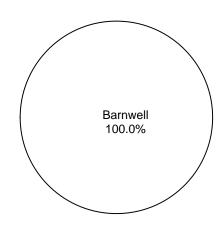
#### NEBRASKA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)	
Barnwell	5,013.28	32,750.85	
Total	5,013.28	32,750.85	

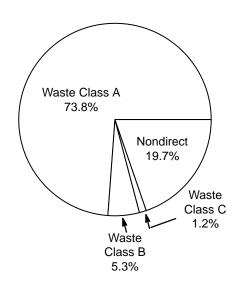
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	3,700.50
В	264.80
C	57.80
Total	4,023.10
Nondirect Shipments	990.18
Total Volume	5,013.28
Total Activity (curies)	32,750.85

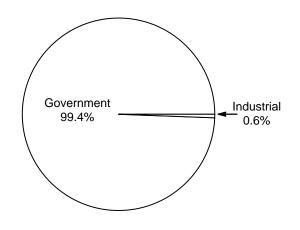


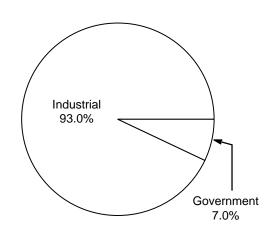
#### OKLAHOMA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

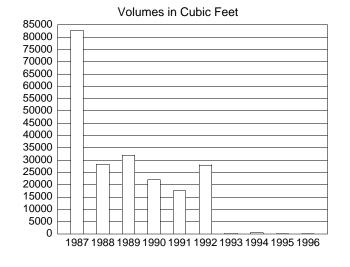
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Government Industrial	150.80	0.03 0.40
Total	151.70	0.43

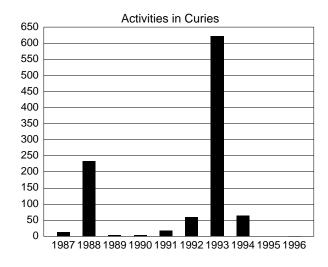
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







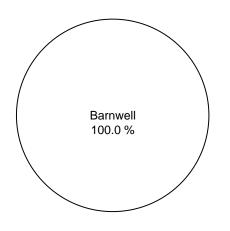


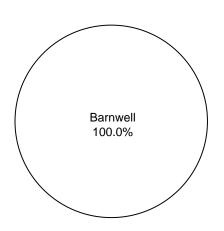
#### OKLAHOMA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

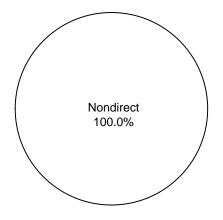
Disposal Site	Volume Activity (curies	
Barnwell	151.70	0.43
Total	151.70	0.43

# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



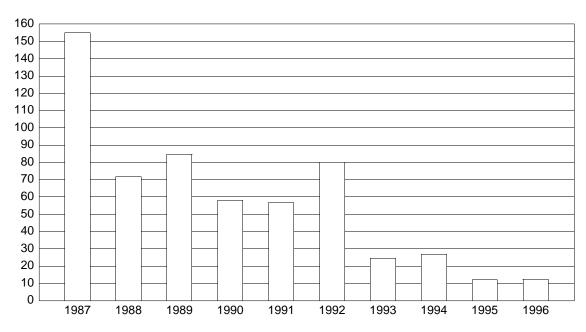


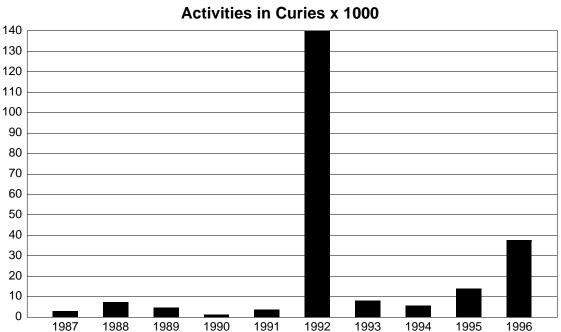


# **CENTRAL COMPACT Comparison By Year**

NOTE: The years 1987 through 1996 include all states currently being reported in the Central Midwest compact region.

#### **Volumes in Cubic Feet x 1000**





#### CENTRAL MIDWEST COMPACT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

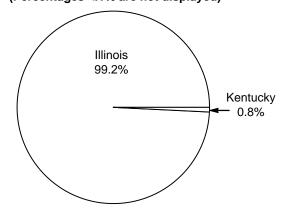
States	Volume (ft <sup>3</sup> )	Activity (curies)
Illinois Kentucky	51,771.22 441.83	57,328.05 462.29
Total	52,213.05	57,790.34

# **VOLUME PERCENTAGE BY STATE** (Percentages <.1% are not displayed)

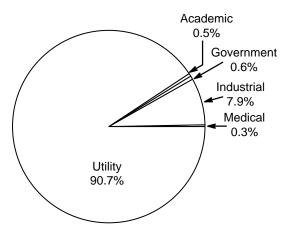
Illinois 99.2%

Kentucky
0.8%

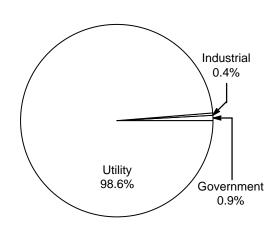
# ACTIVITY PERCENTAGE BY STATE (Percentages <.1% are not displayed)



# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

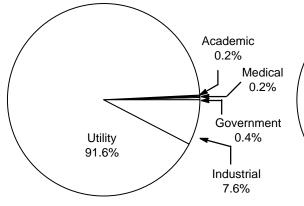


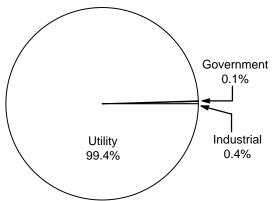
ILLINOIS
Low-Level Radioactive Wastes Received
at Commercial Disposal Sites in 1996

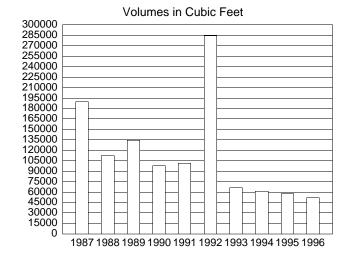
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	124.60	0.25
Government	223.50	88.41
Industrial	3,914.78	206.97
Medical	120.58	1.15
Utility	47,387.76	57,031.27
Total	51,771.22	57,328.05

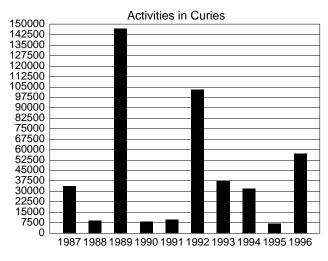
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









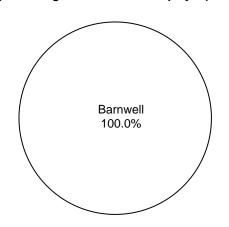
# ILLINOIS Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	51,771.22	57,328.05
Total	51,771.22	57,328.05

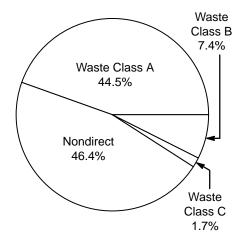
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



#### Volume **Direct Shipment** $(ft^3)$ Waste Class A 23,037.20 В 3,830.60 C 883.80 Total 27,751.60 **Nondirect Shipments** 24,019.62 Total Volume 51,771.22 Total Activity (curies) 57,328.05



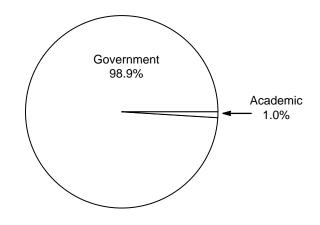
KENTUCKY Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

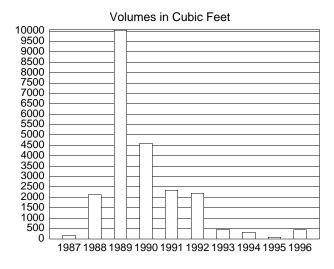
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	135.67	4.65
Government	76.88	457.63
Industrial	209.98	<.01
Medical	19.30	<.01
Total	441.83	462.29

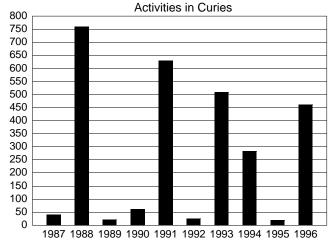
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# Academic 30.7% Medical 4.4% Industrial 47.5%

## ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





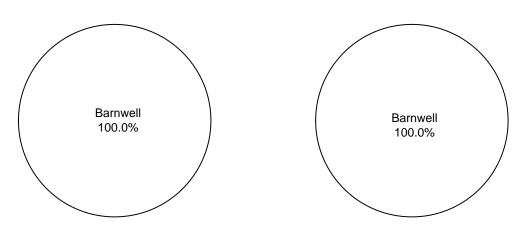


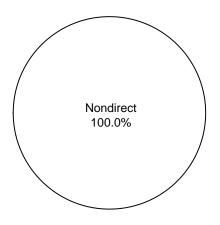
#### KENTUCKY Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	441.83	462.29
Total	441.83	462.29

# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

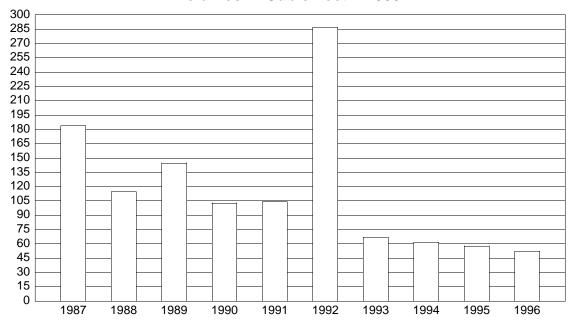




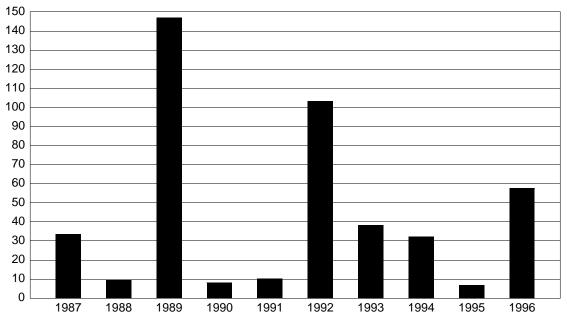
# CENTRAL MIDWEST COMPACT Comparison By Year

NOTE: The years 1987 through 1996 include all states currently being reported in the Central Midwest compact region.

#### **Volumes in Cubic Feet x 1000**



#### **Activities in Curies x 1000**

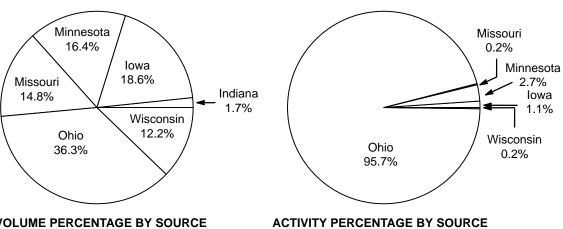


#### MIDWEST COMPACT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

States	Volume (ft <sup>3</sup> )	Activity (curies)
Indiana	328.98	9.61
Iowa	3,639.22	552.04
Minnesota	3,215.22	1,406.00
Missouri	2,916.99	150.40
Ohio	7,090.83	50,021.21
Wisconsin	2,396.65	153.07
Total	19,587.89	52,292.33

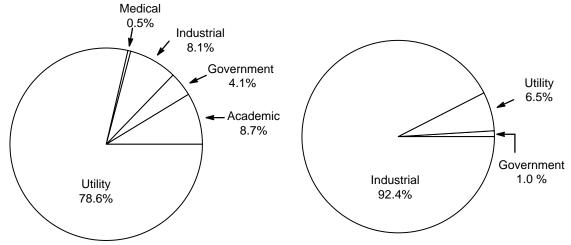
**VOLUME PERCENTAGE BY STATE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY STATE (Percentages <.1% are not displayed)



**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

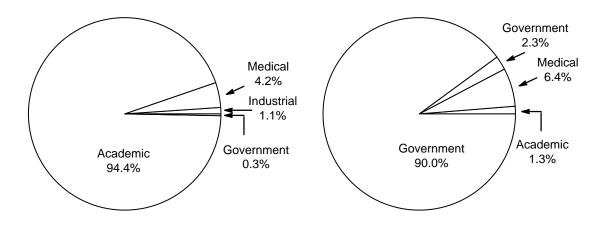


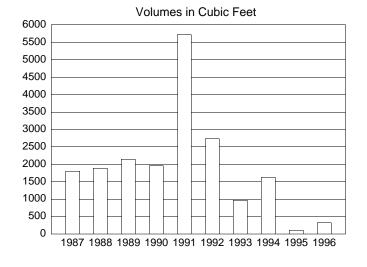
INDIANA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

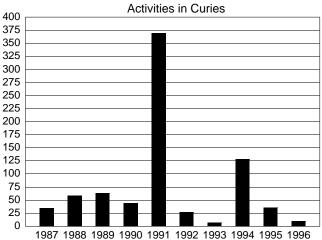
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	310.51	8.66
Government	1.18	.22
Industrial	3.59	.12
Medical	13.70	.62
Total	328.98	9.61

# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



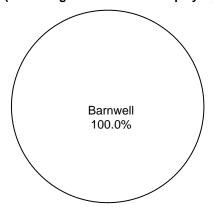




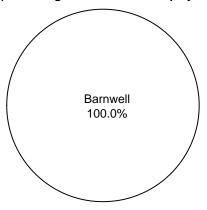
INDIANA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

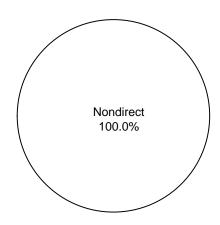
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	328.98	9.61
Total	328.98	9.61

# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



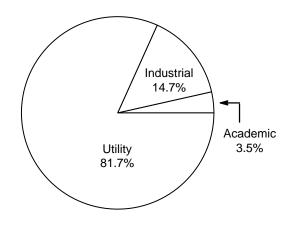


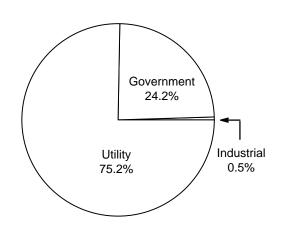
IOWA
Low-Level Radioactive Wastes Received
at Commercial Disposal Sites in 1996

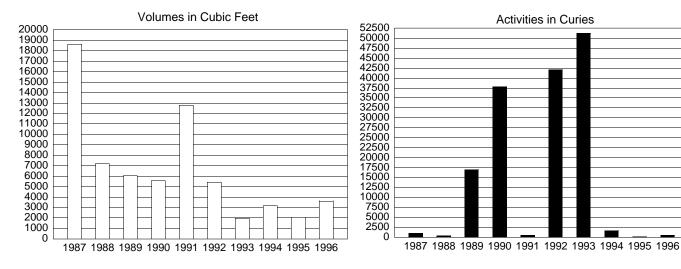
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	127.32	.12
Government	2.20	133.85
Industrial	537.30	3.09
Utility	2,972.40	414.98
Total	3,639.22	552.04

**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



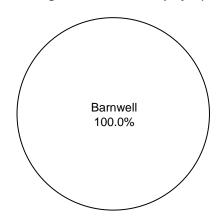




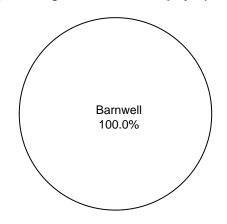
#### IOWA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	3,639.22	552.04
Total	3,639.22	552.04

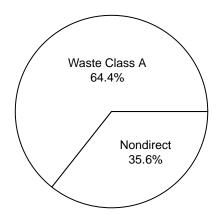
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A B	2,342.40
C	0
Total	2,342.40
Nondirect Shipments	1,296.82
Total Volume	3,639.22
Total Activity (curies)	552.04

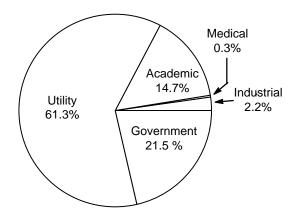


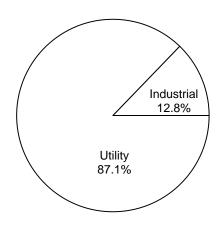
#### MINNESOTA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

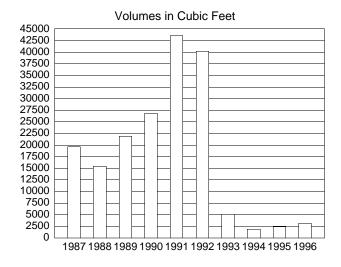
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	472.50	.45
Government	690.20	<.1
Industrial	72.19	180.88
Medical	10.70	<.1
Utility	1,969.63	1,224.66
Total	3,215.22	1,406.00

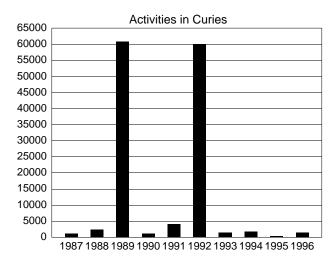
## **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

## ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





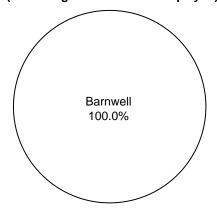




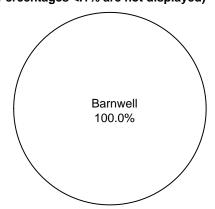
#### MINNESOTA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	3,215.22	1,406.00
Total	3,215.22	1,406.00

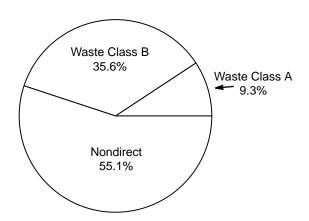
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	299.20
В	1,145.10
C	0
Total	1,444.30
Nondirect Shipments	1,770.92
Total Volume	3,215.22
Total Activity (curies)	1,406.00

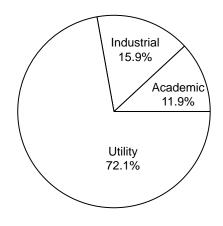


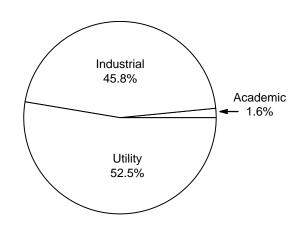
#### MISSOURI Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

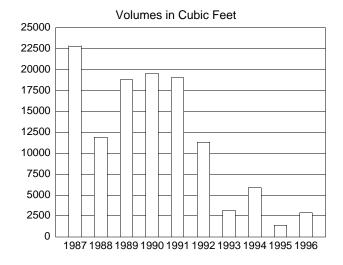
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	347.27	2.50
Government	.68	<.1
Industrial	465.15	68.91
Utility	2,103.89	78.99
Total	2,916.99	150.40

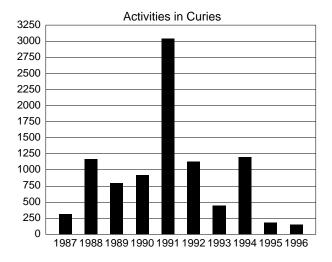
**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





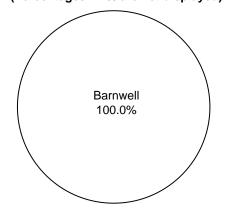




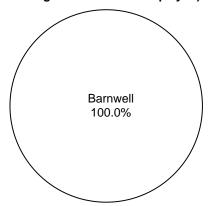
#### MISSOURI Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	2,916.99	150.40
Total	2,916.99	150.40

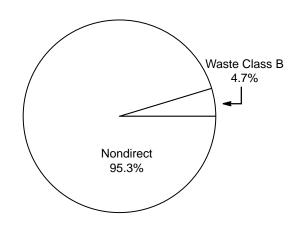
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	0
В	135.80
C	0
Total	135.80
Nondirect Shipments	2,781.19
Total Volume	2,916.99
Total Activity (curies)	150.40

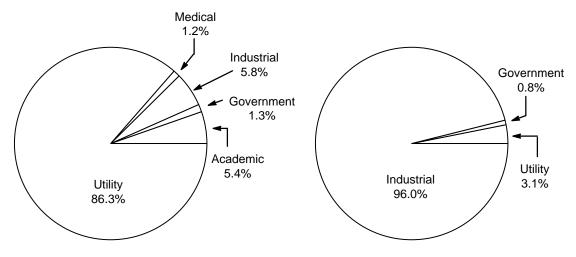


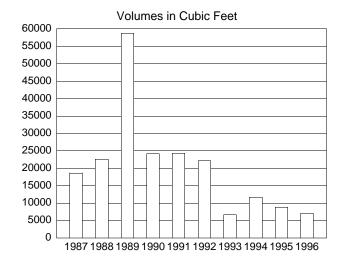
OHIO Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

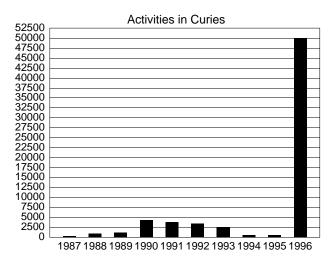
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	385.61	2.23
Government	89.56	421.29
Industrial	414.61	48,058.64
Medical	85.51	.46
Utility	6,115.54	1,538.59
Total	7,090.83	50,021.21

## **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







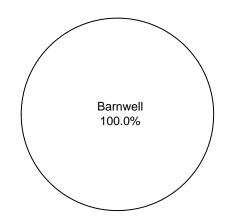
OHIO
Low-Level Radioactive Wastes Received
at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)	
Barnwell	7,090.83	50,021.21	
Total	7,090.83	50,021.21	

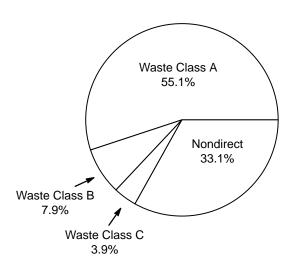
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	3,905.70
В	557.40
C	273.40
Total	4,736.50
Nondirect Shipments	2,354.33
Grand Total	7,090.83
Grand Total (curies)	50,021.21



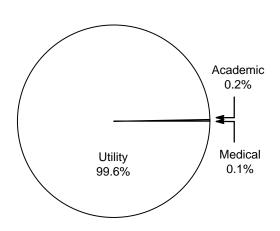
#### WISCONSIN Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

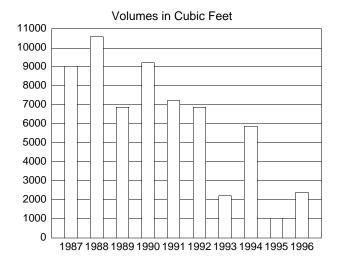
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	66.20	.41
Government	21.58	<.01
Industrial	101.73	.04
Medical	.08	.15
Utility	2,207.06	152.47
Total	2,396.65	153.07

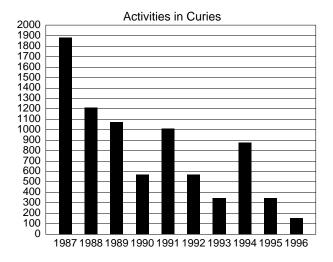
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# Academic 2.8% Industrial 4.2% Government 0.9%

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







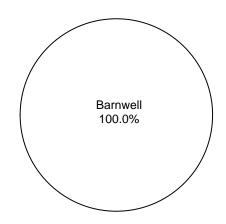
#### **WISCONSIN Low-Level Radioactive Wastes Received** at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	2,396.65	153.07
Total	2,396.65	153.07

#### **VOLUME PERCENTAGE BY DISPOSAL SITE** (Percentages <.1% are not displayed)

# Barnwell 100.0%

#### **ACTIVITY PERCENTAGE BY DISPOSAL SITE** (Percentages <.1% are not displayed)



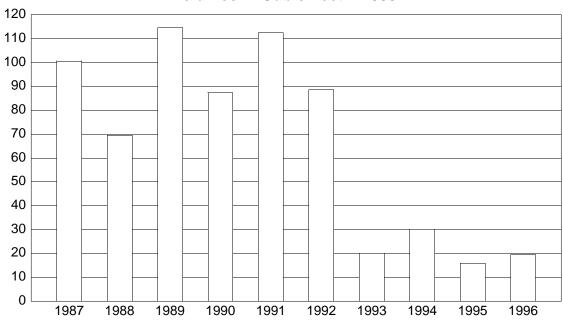
#### **VOLUME PERCENTAGE BY WASTE CLASS** FOR DIRECT SHIPMENTS AND TOTAL NONDIRECT VOLUME PERCENTAGE ayed)

Direct Shipment	Volume	(Percentages <.1% are not displayed)
Waste Class	$(ft^3)$	
		Waste Class C
A	1,142.60	7.0%
В	120.30	Waste Class A
C	166.80	47.7%
Total	1,429.70	
Nondirect Shipments	966.95	
Total Volume	2,396.65	Nondirect 40.3%
Total Activity (curies)	153.07	40.576
	Was	ste Class B
		5.0%

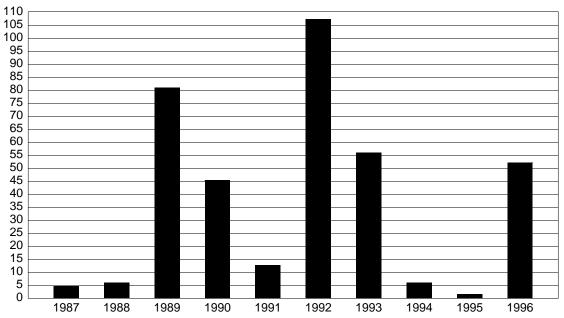
# MIDWEST COMPACT Comparison By Year

NOTE: The years 1987 through 1996 include all states currently being reported in the Midwest compact region.

#### **Volumes in Cubic Feet x 1000**



#### **Activities in Curies x 1000**

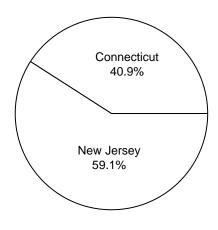


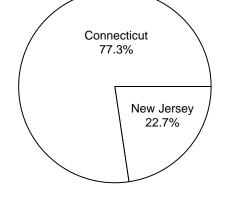
#### NORTHEAST COMPACT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

States	Volume $(ft^3)$	Activity (curies)
Connecticut New Jersey	10,920.12 15,805.16	3,088.11 906.65
Total	26,725.28	3,994.76

# VOLUME PERCENTAGE BY STATE (Percentages <.1% are not displayed)

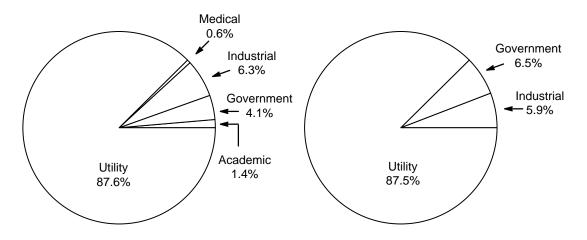
# ACTIVITY PERCENTAGE BY STATE (Percentages <.1% are not displayed)





# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

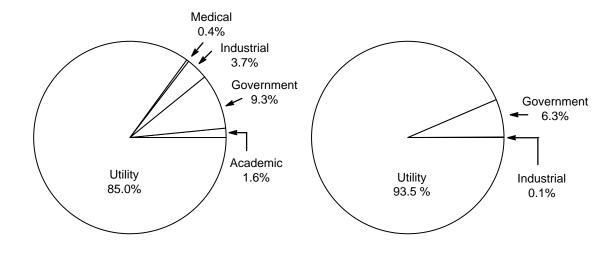


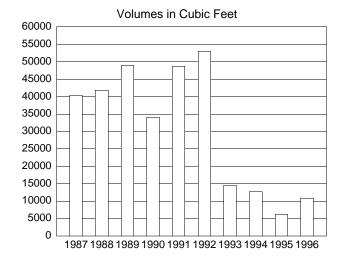
# CONNECTICUT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

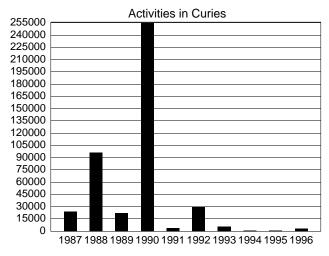
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	175.01	0.22
Government	1,016.10	193.05
Industrial	401.79	3.16
Medical	42.07	.03
Utility	9,285.15	2,891.65
Total	10,920.12	3,088.11

# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



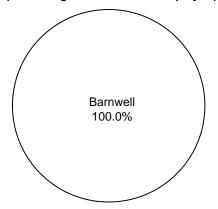




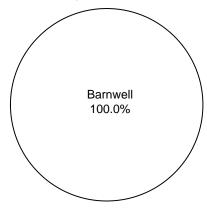
# CONNECTICUT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)	
Barnwell	10,920.12	3,088.11	
Total	10,920.12	3,088.11	

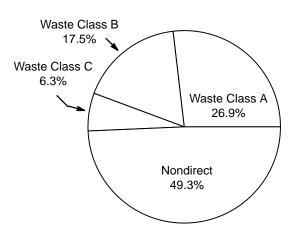
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	2,937.80
В	1,911.70
C	683.30
Total	5,532.80
Nondirect Shipments	5,387.32
Total Volume	10,920.12
Total Activity (curies)	3,088.11

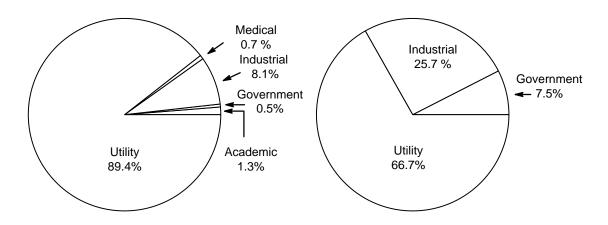


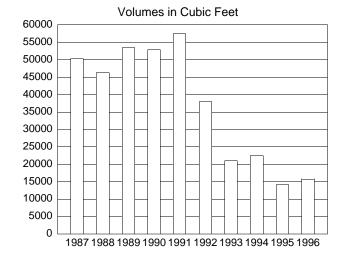
#### NEW JERSEY Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

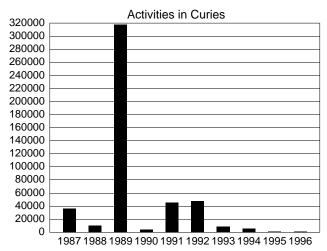
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	202.46	0.28
Government	88.89	68.40
Industrial	1,273.72	233.11
Medical	113.91	0.11
Utility	14,126.18	604.76
Total	15,805.16	906.65

# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



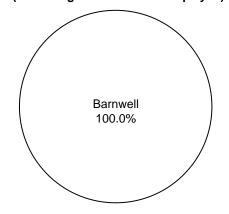




#### **NEW JERSEY Low-Level Radioactive Wastes Received** at Commercial Disposal Sites in 1996

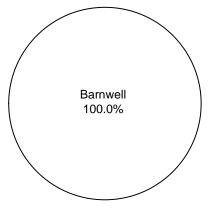
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	15,805.16	906.65
Total	15,805.16	906.65

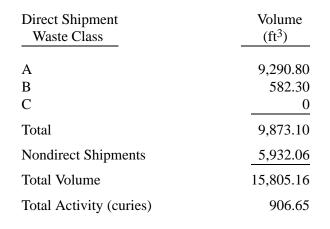
#### **VOLUME PERCENTAGE BY DISPOSAL SITE** (Percentages <.1% are not displayed)

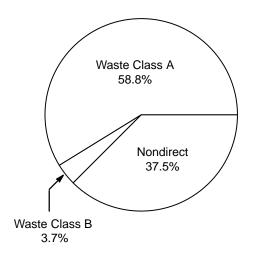


# (Percentages <.1% are not displayed)

**ACTIVITY PERCENTAGE BY DISPOSAL SITE** 



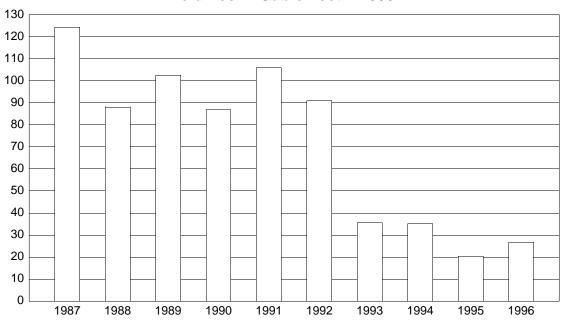




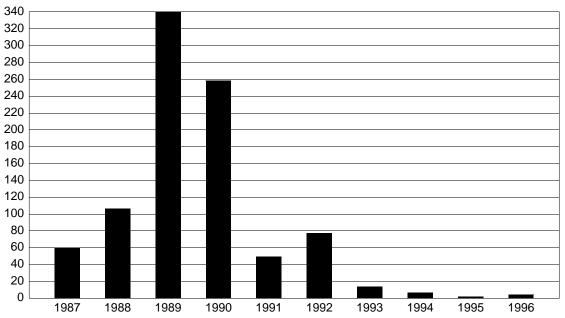
# NORTHEAST COMPACT Comparison By Year

NOTE: The years 1987 through 1996 include all states currently being reported in the Northeast compact region.

#### **Volumes in Cubic Feet x 1000**



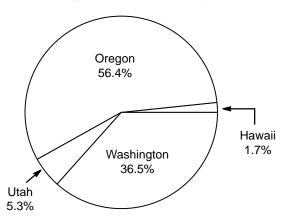




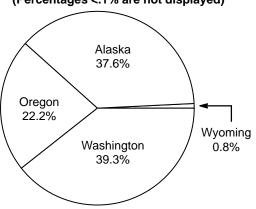
#### NORTHWEST COMPACT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

	Volume	Activity
States	$(ft^3)$	(curies)
Alaska	10.20	603.00
Hawaii	1,572.03	1.06
Idaho	0	0
Montana	0	0
Oregon	52,082.40	356.74
Utah	4,924.50	.26
Washington	33,696.09	630.63
Wyoming	.50	13.21
Total	92,285.72	1,604.90

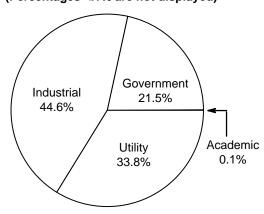
# VOLUME PERCENTAGE BY STATE (Percentages <.1% are not displayed)



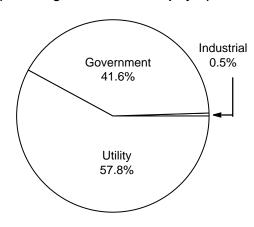
# ACTIVITY PERCENTAGE BY STATE (Percentages <.1% are not displayed)



# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



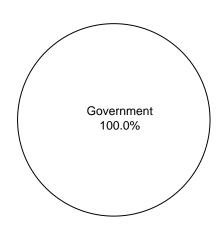
#### ALASKA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

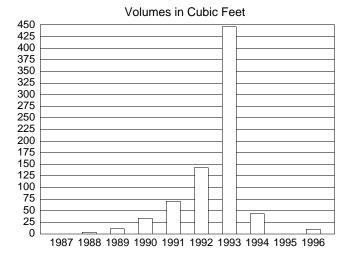
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Government	10.20	603.00
Total	10.20	603.00

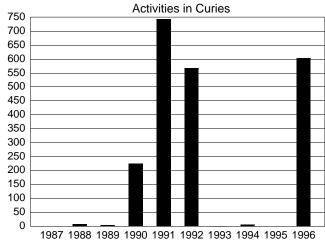
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# Government 100.0%

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







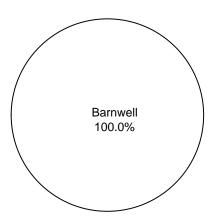
#### ALASKA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

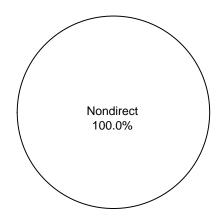
Disposal Site	Volume Acti $(ft^3)$ (curi	
Barnwell	10.20	603.00
Total	10.20	603.00

# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



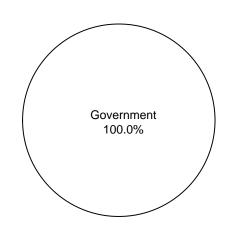


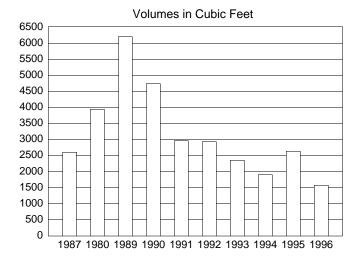
HAWAII Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

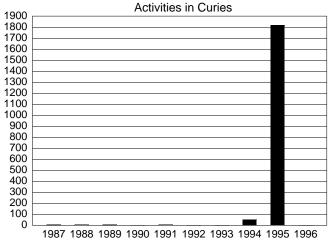
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)	
Government	1,572.03	1.06	
Total	1,572.03	1.06	

# Government 100.0%

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







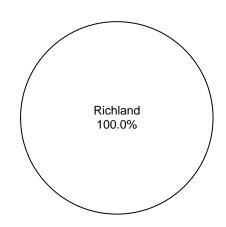
#### HAWAII Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Richland	1,572.03	1.06
Total	1,572.03	1.06

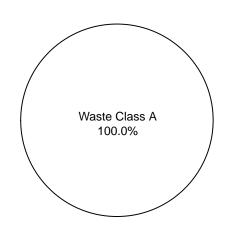
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Richland 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A B C	1,572.03 0 0
Total	1,572.03
Nondirect Shipments	0
Total Volume	1,572.03
Total Activity (curies)	1.06

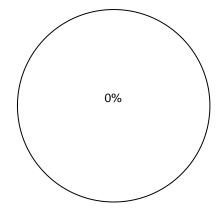


# IDAHO Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

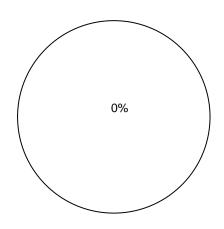
GeneratorVolumeActivityCategory $(ft^3)$ (curies)

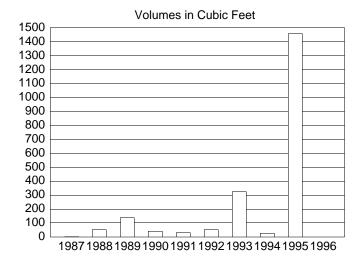
No LLW Disposed in 1996

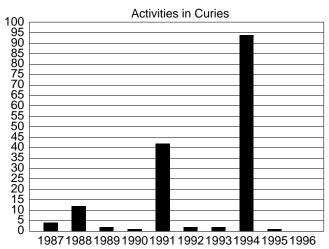
**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







#### MONTANA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

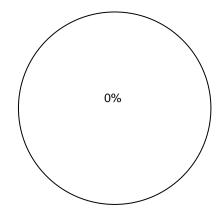
Generator Category Volume (ft<sup>3</sup>)

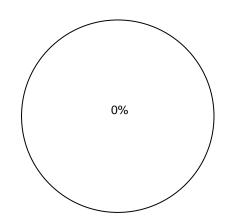
Activity (curies)

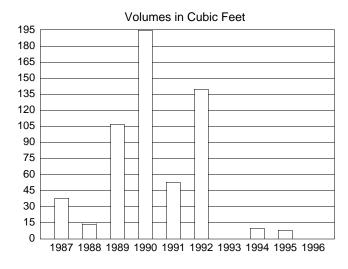
No LLW Disposed in 1996

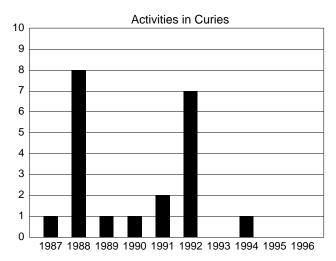
**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







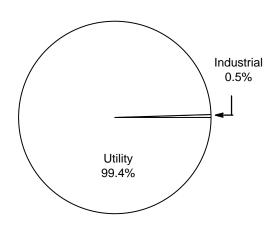


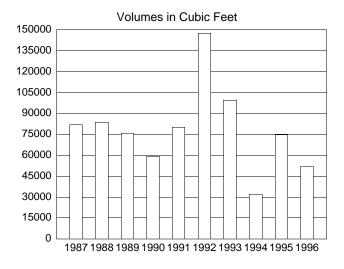
OREGON
Low-Level Radioactive Wastes Received
at Commercial Disposal Sites in 1996

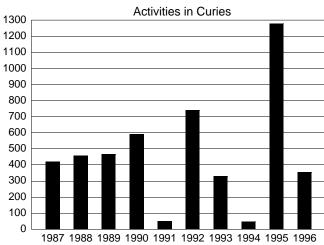
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	41.40	.14
Industrial	26,580.00	1.97
Utility	25,461.00	354.63
Total	52,082.40	356.74

# Industrial 51.0% Utility 48.9%

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



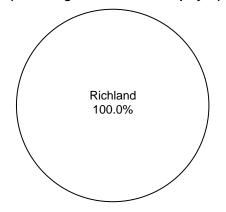




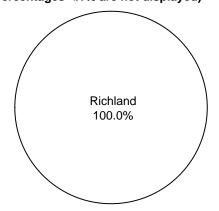
#### OREGON Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)	
Richland	52,082.40	356.74	
Total	52,082.40	356.74	

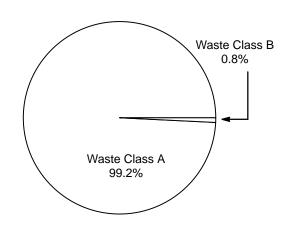
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	51,685.20
В	397.20
C	0
Total	52,082.40
Nondirect Shipments	0
Total Volume	52,082.40
Total Activity (curies)	356.74

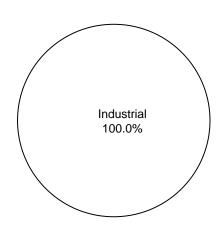


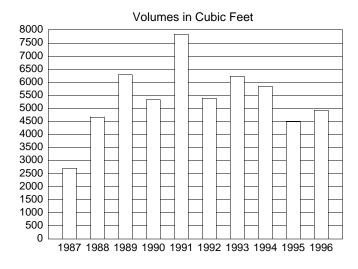
UTAH Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

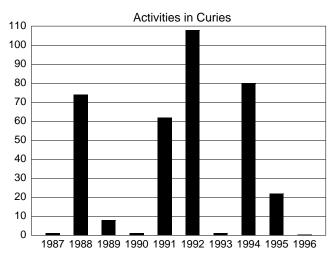
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)	
Industrial	4,924.50	.26	
Total	4,924.50	.26	

# Industrial 100.0%

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



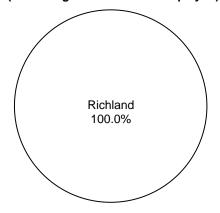




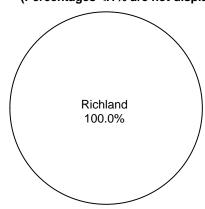
#### UTAH Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)	
Richland	4,924.50	.26	
Total	4,924.50	.26	

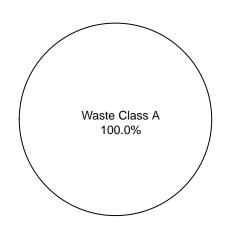
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A B C	4,924.50 0 0
Total	4,924.50
Nondirect Shipments	0
Total Volume	4,924.50
Total Activity (curies)	.26

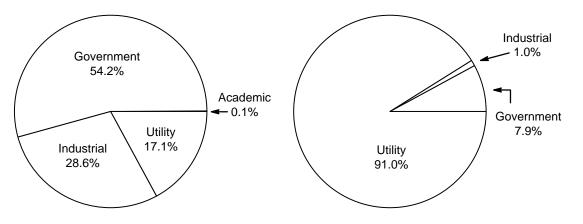


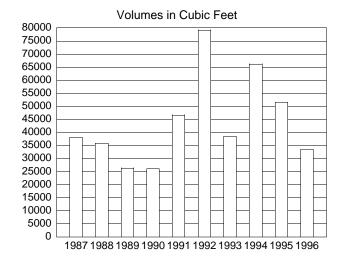
# WASHINGTON Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

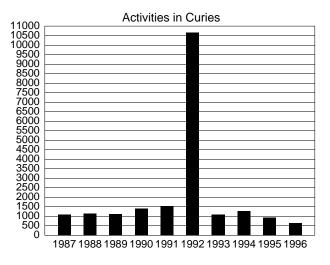
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	39.68	.16
Government	18,252.00	49.98
Industrial	9,648.71	6.86
Utility	5,755.70	573.63
Total	33,696.09	630.63

# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







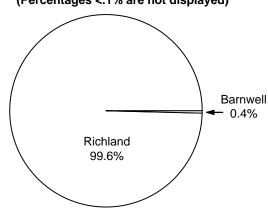
# WASHINGTON Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	597.10	2.41
Richland	33,098.99	628.22
Total	33,696.09	630.63

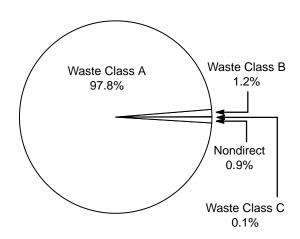
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Richland 98.2%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A B C	32,956.39 397.20 49.90
Total	33,403.49
Nondirect Shipments	292.60
Total Volume	33,696.09
Total Activity (curies)	630.63

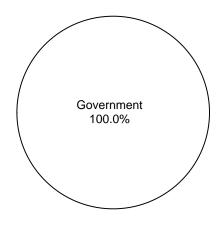


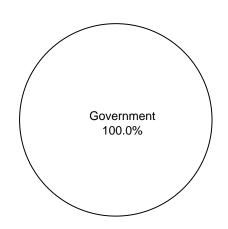
#### WYOMING Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

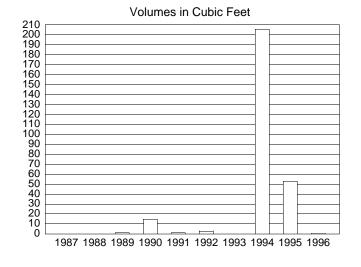
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Government	.50	13.21
Total	.50	13.21

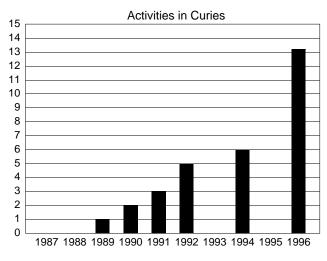
**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









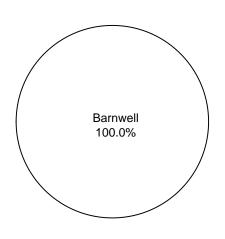
#### WYOMING Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

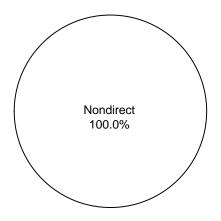
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	.50	13.21
Total	.50	13.21

#### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

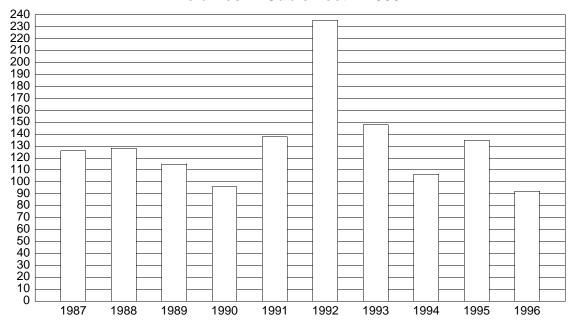




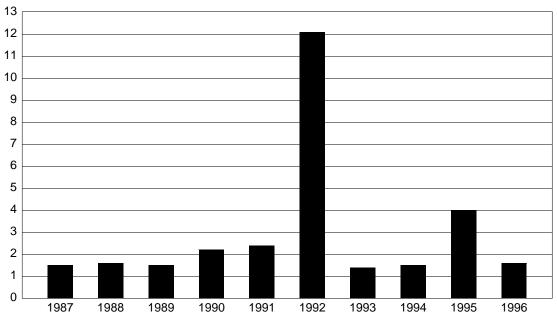
# NORTHWEST COMPACT Comparison By Year

NOTE: The years 1987 through 1996 include all states currently being reported in the Northeast compact region.

#### **Volumes in Cubic Feet x 1000**



#### **Activities in Curies x 1000**



#### ROCKY MOUNTAIN COMPACT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

States	Volume (ft <sup>3</sup> )	Activity (curies)
Colorado	4,671.74	76.65
Nevada	117.70	2.35
New Mexico	49.90	3.89
Total	4,839.34	82.89

# **VOLUME PERCENTAGE BY STATE** (Percentages <.1% are not displayed)

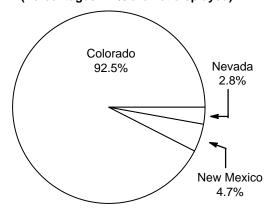
Colorado 96.6%

New Mexico 1.0%

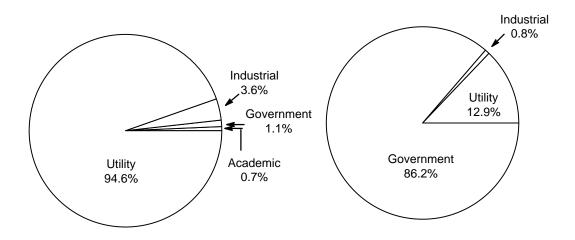
Nevada 2.4%

**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY STATE (Percentages <.1% are not displayed)



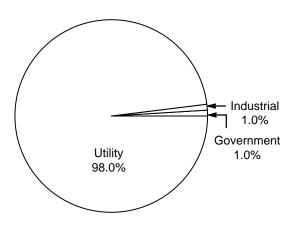
ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

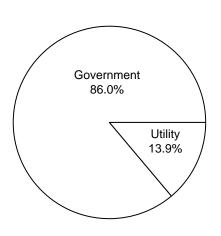


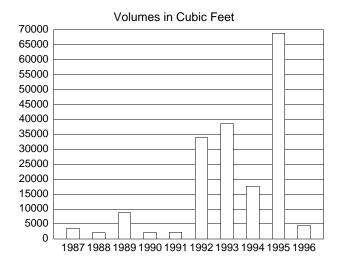
COLORADO Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

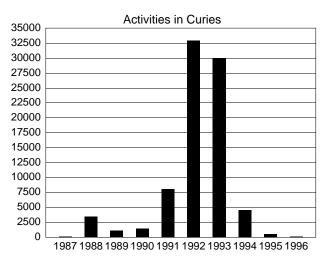
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Government	47.30	65.99
Industrial	46.54	<.1
Utility	4,577.90	10.66
Total	4,671.74	76.65

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





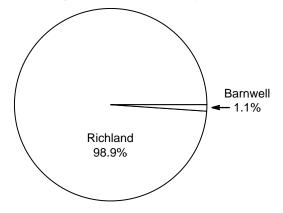




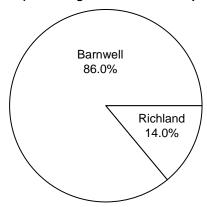
#### COLORADO Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	48.84	65.94
Richland	4,622.90	10.71
Total	4,671.74	76.65

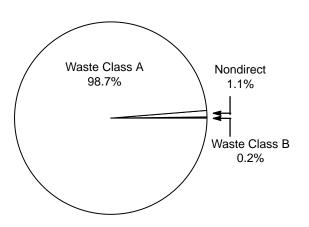
#### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



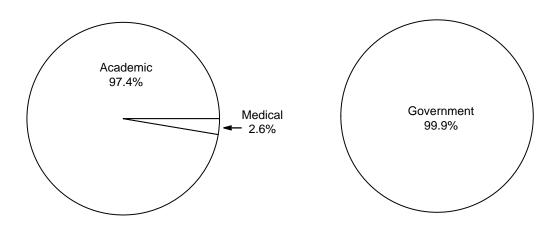
Direct Shipment	Volume
Waste Class	$(ft^3)$
A	4,615.40
В	7.50
C	0
Total	4,622.90
Nondirect Shipments	48.84
Total Volume	4,671.74
Total Activity (curies)	76.65

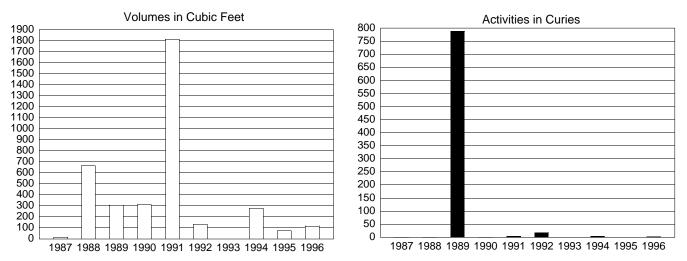


NEVADA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Government Industrial	3.10 114.60	2.35 <.01
Total	117.70	2.35

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

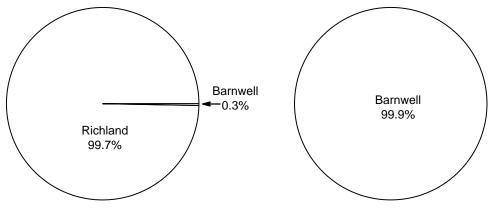


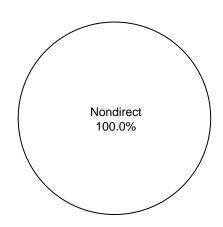


NEVADA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell Richland	.40 117.30	2.35 <.01
Total	117.70	2.35

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



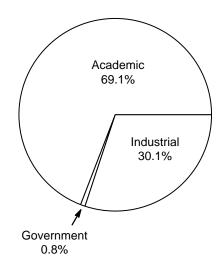


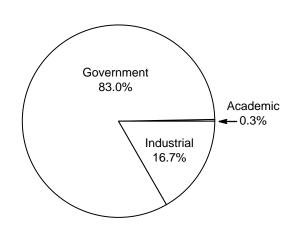
#### NEW MEXICO Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

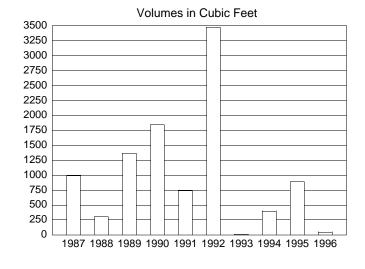
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	34.50	.01
Government	.40	3.23
Industrial	15.00	.65
Total	49.90	3.89

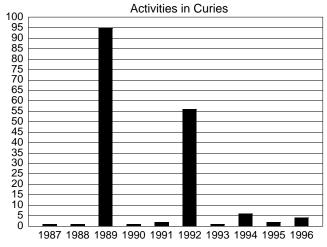
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









#### NEW MEXICO Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

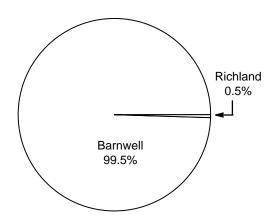
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell Richland	15.40 34.50	3.87
Total	49.90	3.89

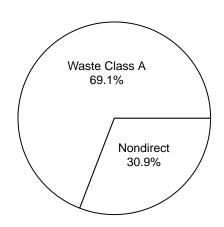
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 30.9% Richland 69.1%

#### **Direct Shipment** Volume $(ft^3)$ Waste Class 34.50 A В 0 C 0 Total 34.50 **Nondirect Shipments** 15.40 Total Volume 49.90 3.89 Total Activity (curies)

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

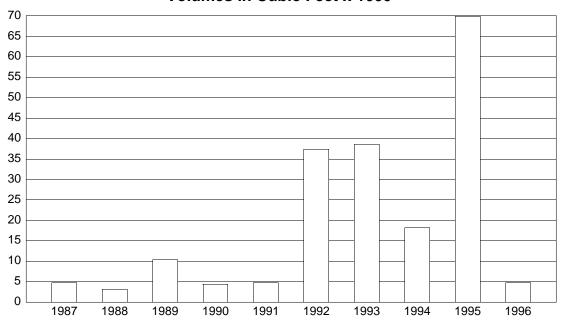




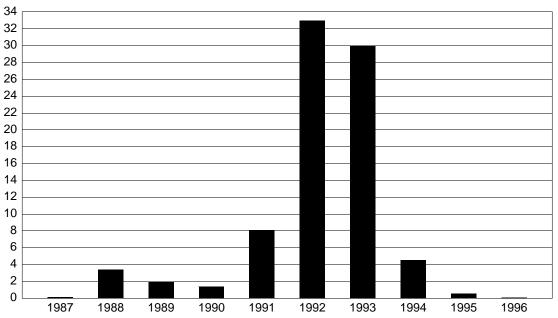
# ROCKY MOUNTAIN COMPACT Comparison By Year

NOTE: The years 1987 through 1996 includes all states currently being reported in the Rocky Mountain compact region.

#### **Volumes in Cubic Feet x 1000**



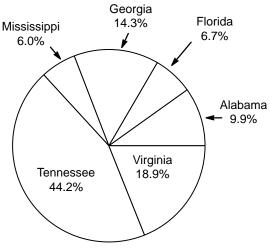
#### **Activities in Curies x 1000**



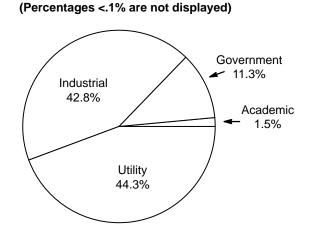
#### SOUTHEAST COMPACT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

	Volume	Activity
States	$(ft^3)$	(curies)
Alabama	0.267.12	22 201 20
Alabama	9,267.12	22,281.20
Florida	6,220.33	1,417.70
Georgia	13,405.88	122,519.67
Mississippi	5,600.72	2,817.54
North Carolina	0	0
Tennessee	41,312.95	644.86
Virginia	17,663.13	10,375.11
Total	93,470.13	160,056.07

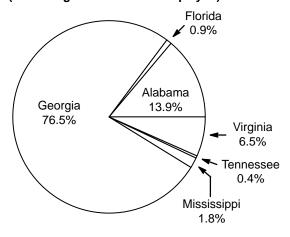
# **VOLUME PERCENTAGE BY STATE** (Percentages <.1% are not displayed)



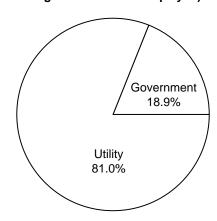
#### VOLUME PERCENTAGE BY SOURCE



# ACTIVITY PERCENTAGE BY STATE (Percentages <.1% are not displayed)



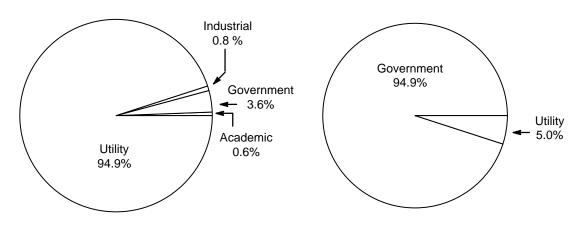
# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

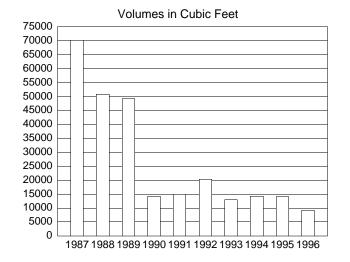


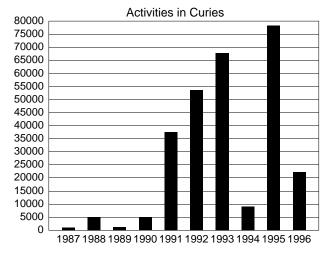
ALABAMA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	51.68	.02
Government	335.60	21,163.68
Industrial	76.64	2.91
Medical	2.50	<.01
Utility	8,800.70	1,114.58
Total	9,267.12	22,281.20

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



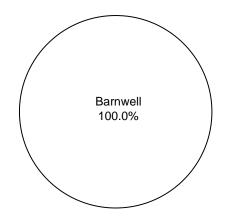




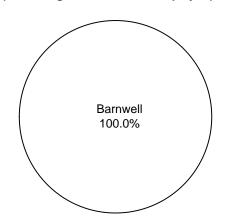
#### ALABAMA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)	
Barnwell	9,267.12	22,281.20	
Total	9,267.12	22,281.20	

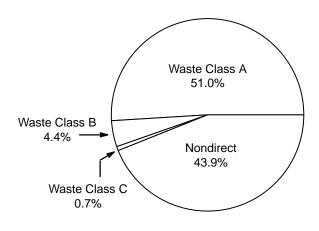
#### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



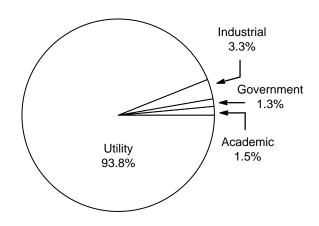
Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	4,730.80
В	409.20
C	61.20
Total	5,201.20
Nondirect Shipments	4,065.92
Total Volume	9,267.12
Total Activity (curies)	22,281.20

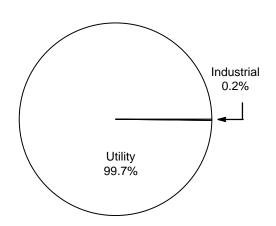


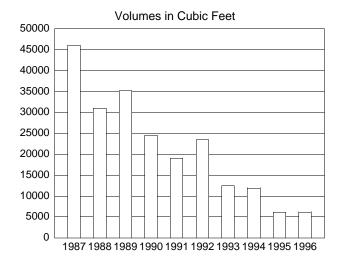
FLORIDA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

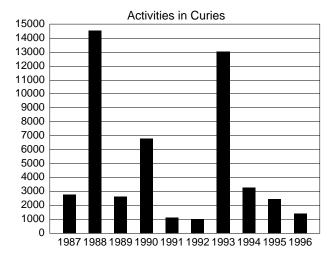
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	93.10	.21
Government	79.62	.74
Industrial	206.41	2.39
Medical	1.50	.23
Utility	5,839.70	1,414.13
Total	6,220.33	1,417.70

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









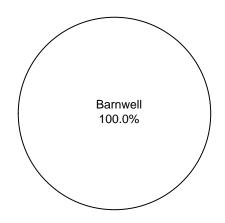
#### FLORIDA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)	
Barnwell	6,220.33	1,417.70	
Total	6,220.33	1,417.70	

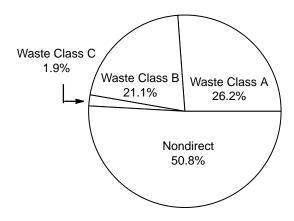
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



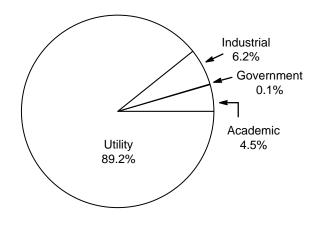
Direct Shipment	Volume
Waste Class	$(ft^3)$
	1 (27 00
A	1,627.90
В	1,312.80
C	120.30
Total	3,061.00
Nondirect Shipments	3,159.33
Total Volume	6,220.33
Total Activity (curies)	1,417.70

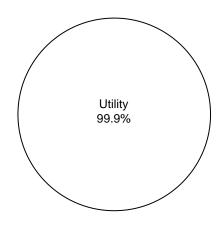


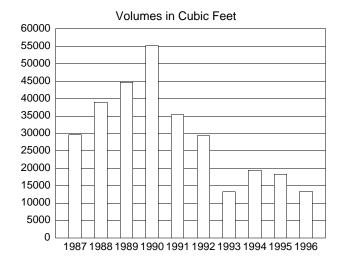
GEORGIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

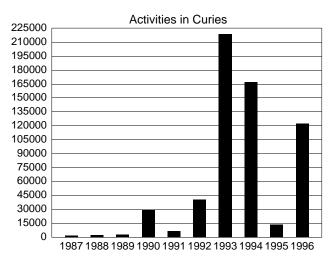
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	595.89	2.44
Government	16.52	.01
Industrial	833.78	2.17
Utility	11,959.69	122,515.04
Total	13,405.88	122,519.67

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









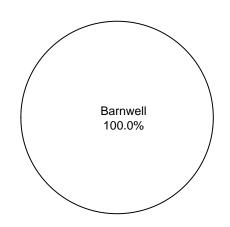
#### GEORGIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)	
Barnwell	13,405.88	122,519.67	
Total	13,405.88	122,519.67	

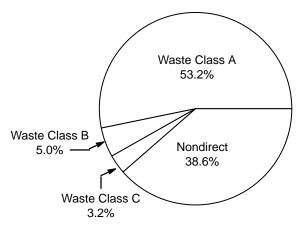
# VOLUME PERCENTAGE BY DISPOSAL SITE (percentages <.1% are not displayed)

# Barnwell 100.0%

# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



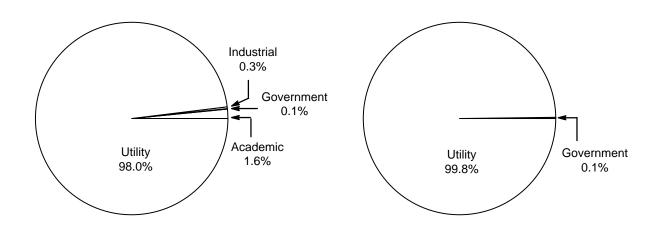
Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	7,127.70
В	667.70
C	424.80
Total	8,220.20
Nondirect Shipments	5,185.68
Total Volume	13,405.88
Total Activity (curies)	122,519.67

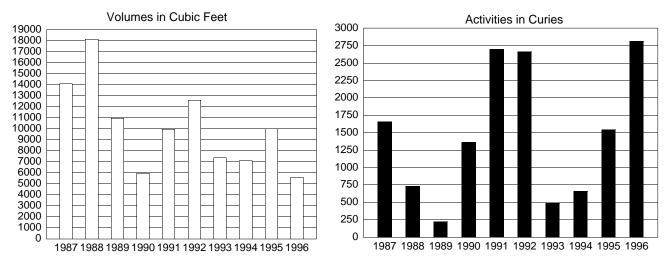


MISSISSIPPI Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

States	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	90.50	1.66
Government	7.40	3.06
Industrial	17.52	<.01
Utility	5,485.30	2,812.81
Total	5,600.72	2,817.54

## ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

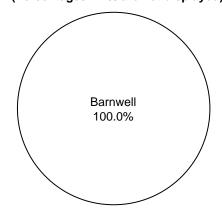




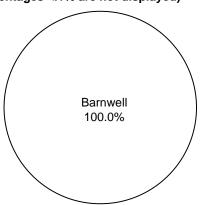
#### MISSISSIPPI Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)	
Barnwell	5,600.72	2,817.54	
Total	5,600.72	2,817.54	

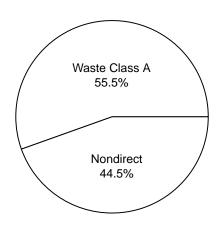
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A B	3,106.50
C Total	3,106.50
Nondirect Shipments	2,494.12
Total Volume	5,600.72
Total Activity (curies)	2,817.54



#### NORTH CAROLINA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

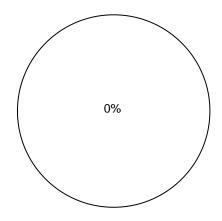
Generator Category Volume (ft<sup>3</sup>)

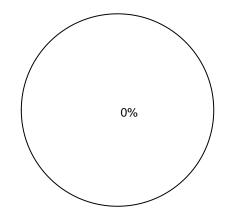
Activity (curies)

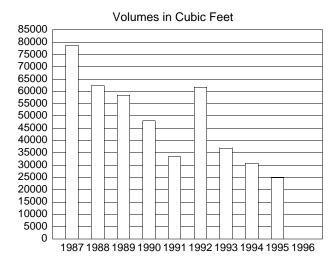
No LLW Disposed in 1996

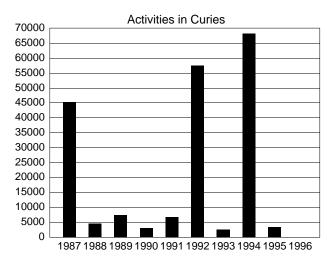
**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





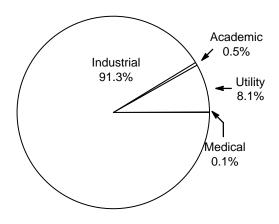




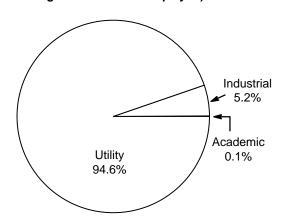
# TENNESSEE Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

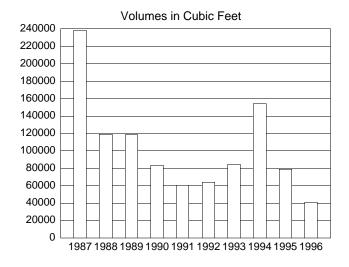
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	210.00	.79
Government	.10	<.01
Industrial	37,717.55	33.18
Medical	54.20	.17
Utility	3,331.10	610.71
Total	41,312.95	644.86

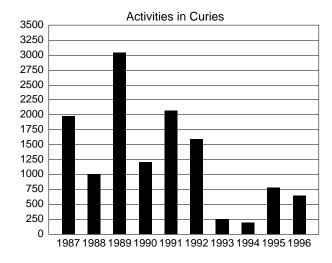
# **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



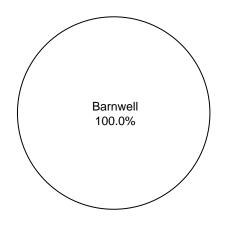




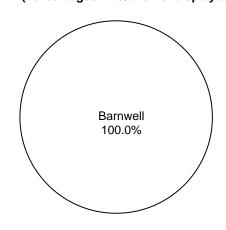
# TENNESSEE Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	41,312.95	644.86
Total	41,312.95	644.86

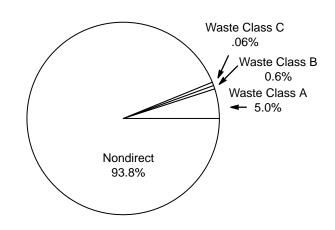
#### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



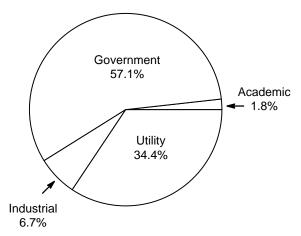
#### **Direct Shipment** Volume Waste Class $(ft^3)$ A 2,084.20 В 240.60 C 240.60 Total 2,565.40 **Nondirect Shipments** 38,747.55 Total Volume 41,312.95 644.86 Total Activity (curies)

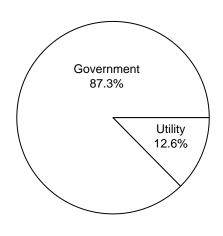


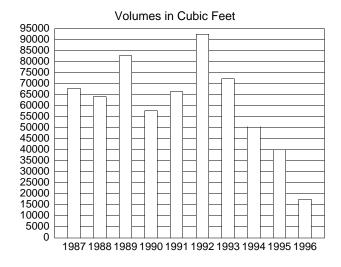
VIRGINIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

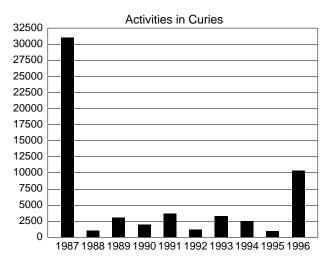
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	322.12	2.03
Government	10,092.20	9,055.35
Industrial	1,180.56	1.98
Utility	6,068.25	1,315.75
Total	17,663.13	10,375.11

# ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





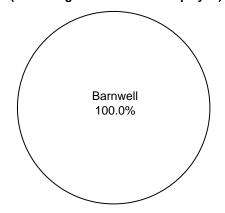




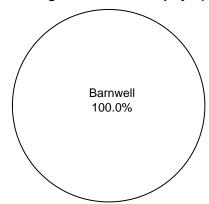
#### VIRGINIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	17,663.13	10,375.11
Total	17,663.13	10,375.11

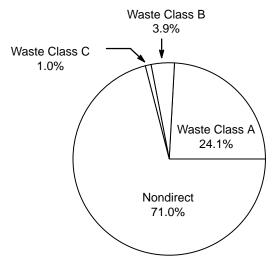
# VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



# ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



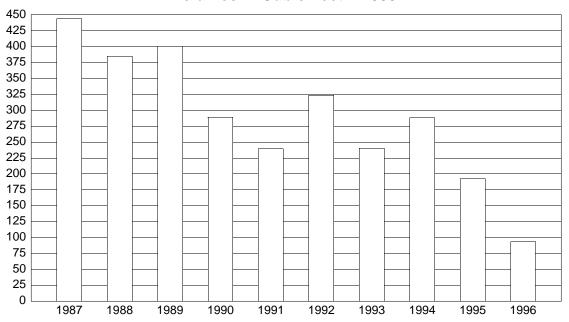
Direct Shipment	Volume
Waste Class	$\frac{\text{(ft}^3)}{\text{(ft}^3)}$
A	4,247.60
В	684.90
С	170.80
Total	5,103.30
Nondirect Shipments	12,559.83
Total Volume	17,663.13
Total Activity (curies)	10,375.11



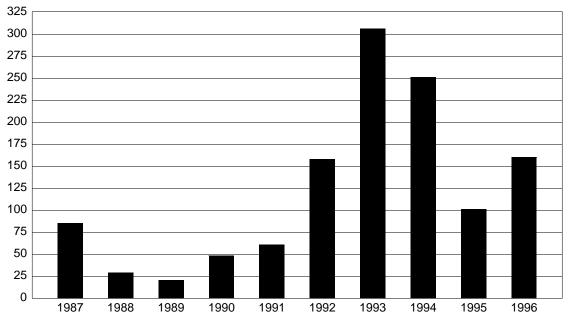
### SOUTHEAST COMPACT Comparison By Year

NOTE: The years 1987 through 1996 include all states currently being reported in the Southeast compact region.

### **Volumes in Cubic Feet x 1000**



### **Activities in Curies x 1000**

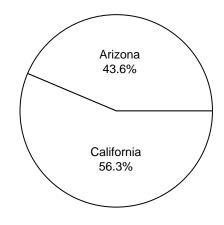


### SOUTHWESTERN COMPACT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

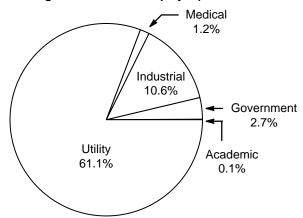
States	Volume (ft <sup>3</sup> )	Activity (curies)
Arizona	9,329.27	16.09
California	12,070.78	3,474.76
North Dakota	4.10	.03
South Dakota	0	0
Total	21,404.15	3,490.87

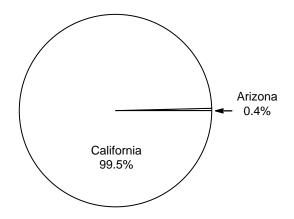
### **VOLUME PERCENTAGE BY STATE** (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY STATE (Percentages <.1% are not displayed)

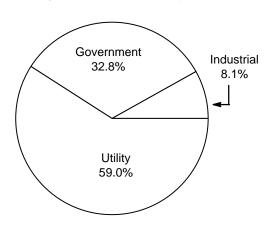


### **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)





### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

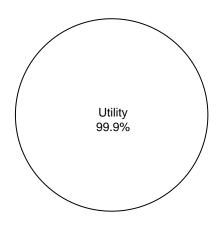


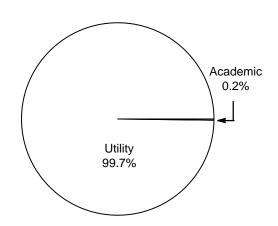
ARIZONA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

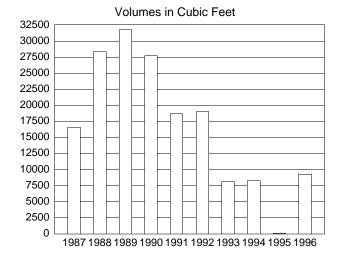
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	7.29	.04
Government	1.98	<.01
Utility	9,320.00	16.05
Total	9,329.27	16.09

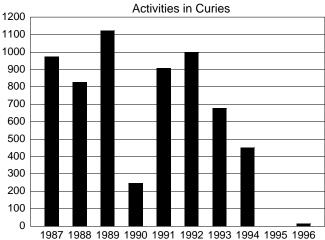
**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





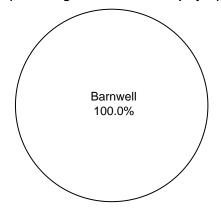




### ARIZONA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

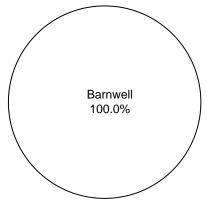
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	9,329.27	16.09
Total	9,329.27	16.09

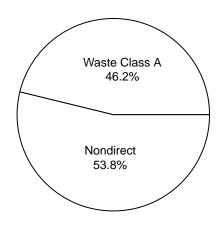
### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	4,310.40
В	0
C	0
Total	4,310.40
Nondirect Shipments	5,018.87
Total Volume	9,329.27
Total Activity (curies)	16.09

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



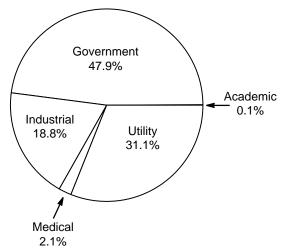


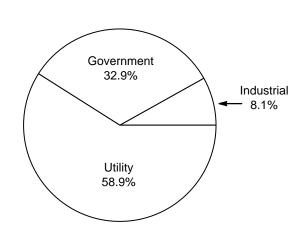
### CALIFORNIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

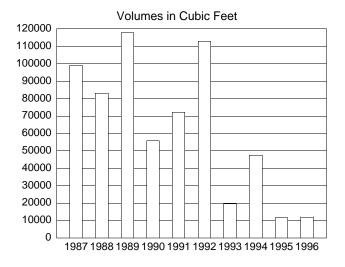
States	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	10.81	.24
Government	5,777.59	1,144.80
Industrial	2,266.14	283.17
Medical	247.02	.62
Utility	3,769.22	2,045.93
Total	12,070.78	3,474.76

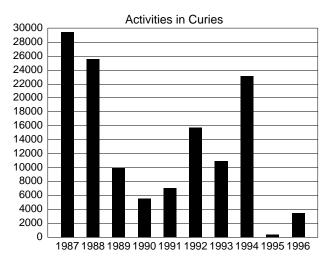
### **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









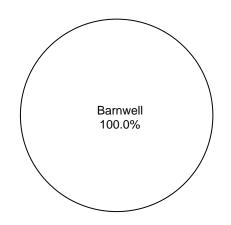
### CALIFORNIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	12,070.78	3,474.76
Total	12,070.78	3,474.76

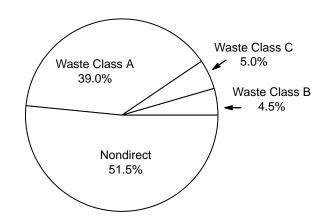
### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment	Volume
Waste Class	$\frac{\text{(ft}^3)}{\text{(ft}^3)}$
A	4,706.90
В	538.80
C	609.40
Total	5,855.10
Nondirect Shipments	6,215.68
Total Volume	12,070.78
Total Activity (curies)	3,474.76

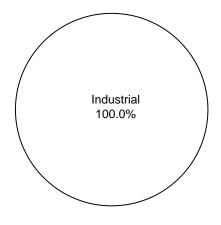


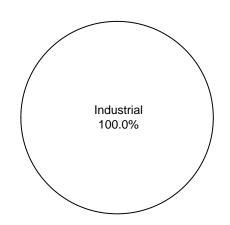
### NORTH DAKOTA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

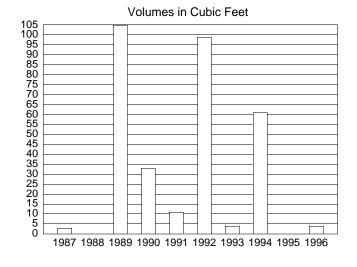
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Industrial	4.10	.03
Total	4.10	.03

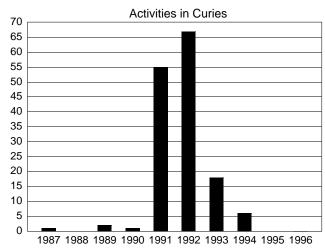
### **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









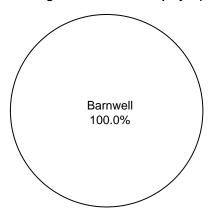
### NORTH DAKOTA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

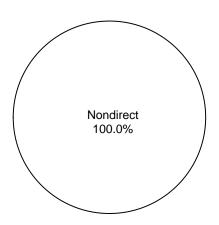
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	4.10	.03
Total	4.10	.03

### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



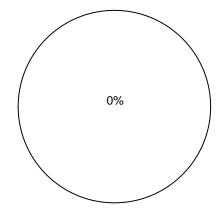


### SOUTH DAKOTA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

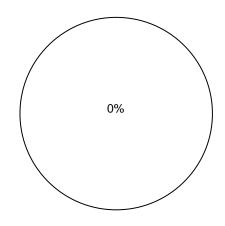
Generator Volume Activity
Category (ft<sup>3</sup>) (curies)

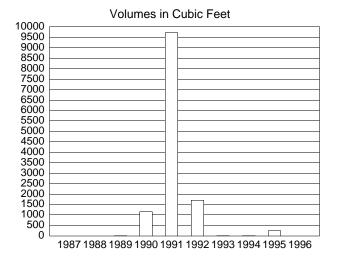
No LLW Disposed in 1996

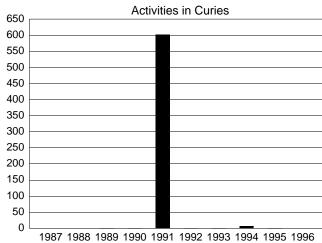
**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)



### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)



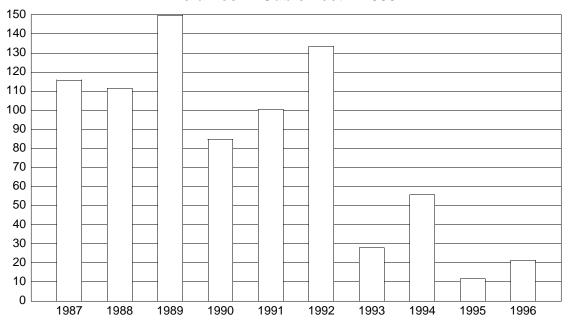




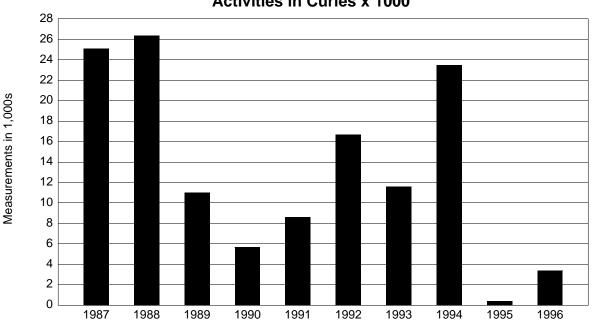
### SOUTHWESTERN COMPACT Comparison By Year

NOTE: The years 1987 through 1996 include all states currently being reported in the Southwestern compact region.

### **Volumes in Cubic Feet x 1000**



### **Activities in Curies x 1000**



## UNAFFILIATED STATES Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

	Volume	Activity
States	$(ft^3)$	(curies)
Army Out U.S.	65.50	133.46
District of Columbia	164.80	.47
Maine <sup>a</sup>	3,499.40	477.12
Massachusetts	10,756.09	16,627.51
Michigan	24,951.04	41,906.96
New Hampshire	2.32	<.1
New York	16,228.39	1,312.36
Puerto Rico	0	0
Rhode Island	91.13	.29
South Carolina	10,273.10	2,347.13
Texas <sup>a</sup>	4,886.60	3,941.45
Vermont <sup>a</sup>	562.60	45.77
Total	71,480.97	66,792.52

a. Proposed member states for pending Texas Compact.

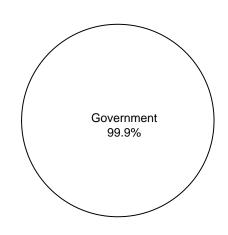
ARMY OUT U.S. Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

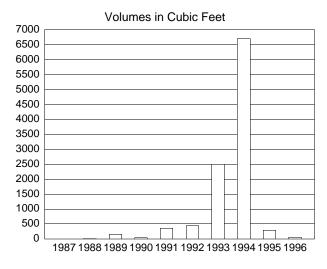
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Government Industrial	15.50 50.00	133.45
Total	65.50	133.46

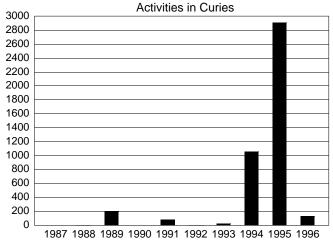
### **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# Industrial 76.3% Government 23.7%

### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





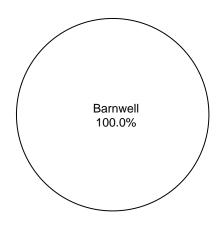


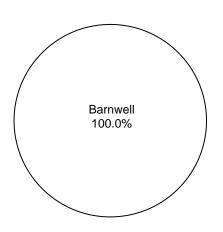
### ARMY OUT U.S. Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

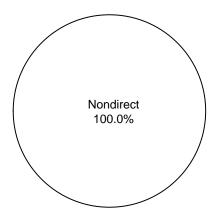
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	65.50	133.46
Total	65.50	133.46

### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)





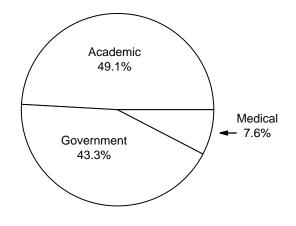


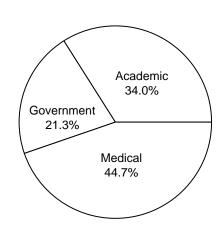
### DISTRICT OF COLUMBIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

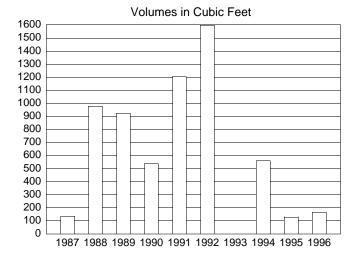
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	80.90	0.16
Government	71.30	0.10
Medical	12.60	0.22
Total	164.80	0.47

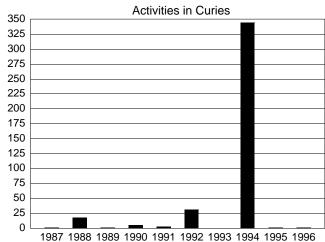
### **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







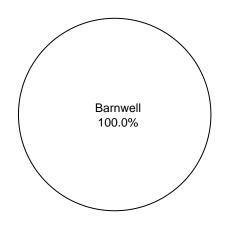


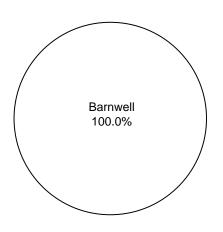
### DISTRICT OF COLUMBIA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

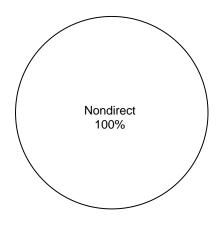
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	164.80	0.47
Total	164.80	0.47

### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)





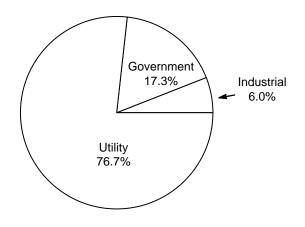


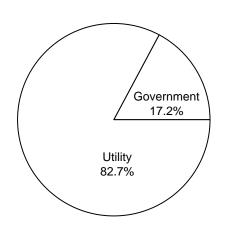
MAINE Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

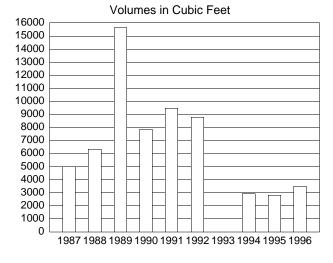
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Government	604.60	82.16
Industrial	209.10	.01
Utility	2,685.70	394.95
Total	3,499.40	477.12

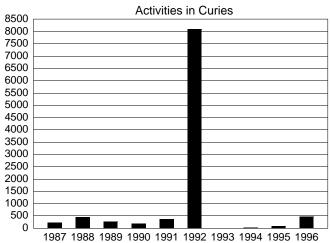
### **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









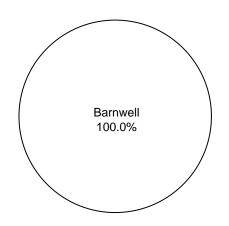
### MAINE Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	3,499.40	477.12
Total	3,499.40	477.12

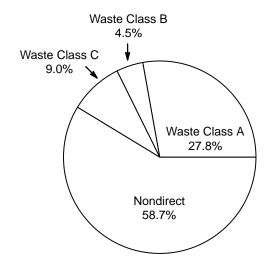
### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	971.40
В	158.10
C	315.30
Total	1,444.80
Nondirect Shipments	2,054.60
Total Volume	3,499.40
Total Activity (curies)	477.12

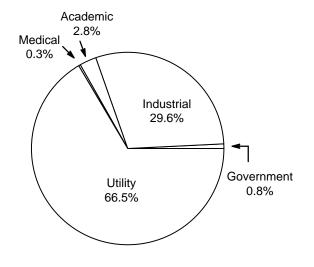


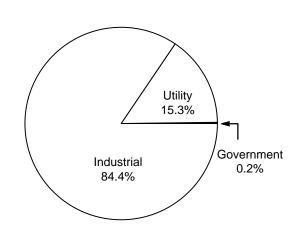
## MASSACHUSETTS Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

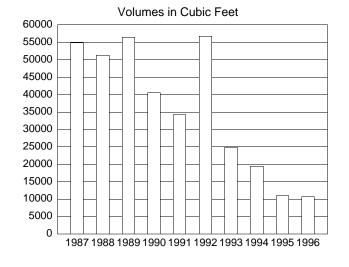
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	297.24	2.02
Government	87.57	38.57
Industrial	3,187.74	14,045.30
Medical	33.35	.19
Utility	7,150.19	2,541.42
Total	10,756.09	16,627.51

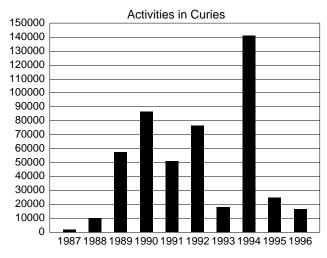
### **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









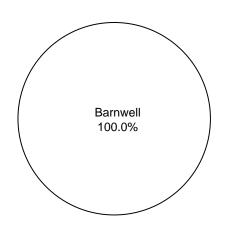
### MASSACHUSETTS Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	10,756.09	16,627.51
Total	10,756.09	16,627.51

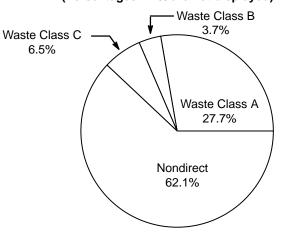
### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	2,984.40
В	396.50
C	701.20
Total	4,082.10
Nondirect Shipments	6,673.99
Total Volume	10,756.09
Total Activity (curies)	16,627.51

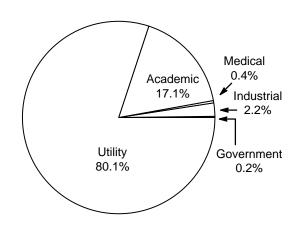


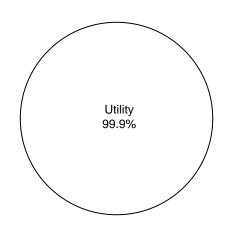
### MICHIGAN Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

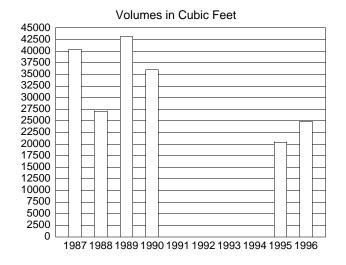
Generator	Volume	Activity
Category	$(\mathrm{ft}^3)$	(curies)
Academic	4,249.68	4.83
Government	56.24	.03
Industrial	553.79	17.54
Medical	98.68	1.90
Utility	19,992.65	41,882.65
Total	24,951.04	41,906.96

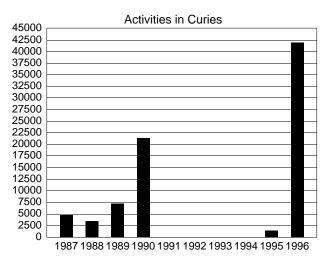
**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







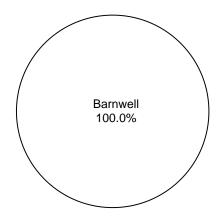


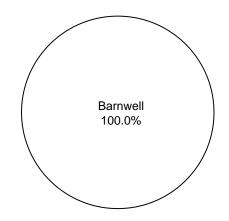
### MICHIGAN Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	24,951.04	41,906.96
Total	24,951.04	41,906.96

### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

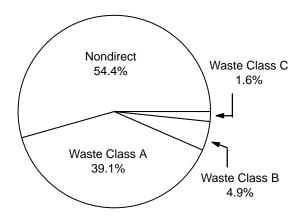
### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)





**Direct Shipment** Volume  $(ft^3)$ Waste Class 9,760.56 A В 1,212.90 C 395.80 Total 11,369.26 **Nondirect Shipments** 13,581.78 Total Volume 24,951.04 Total Activity (curies) 41,906.96

VOLUME PERCENTAGE BY WASTE CLASS FOR DIRECT SHIPMENTS AND TOTAL NONDIRECT VOLUME PERCENTAGE (Percentages <.1% are not displayed)



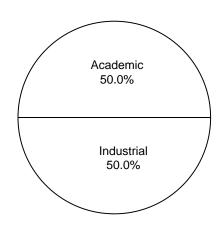
### NEW HAMPSHIRE Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

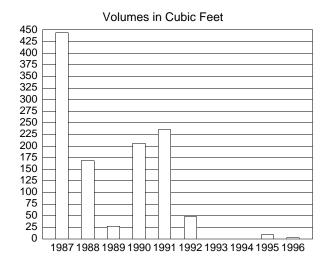
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	.42	<.01
Industrial	1.90	<.01
Total	2.32	<1

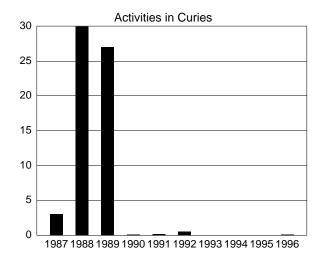
### **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

# Academic 18.1% Industrial 89.9%

### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







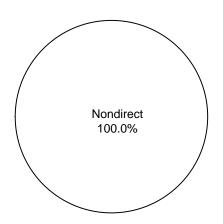
### NEW HAMPSHIRE Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	2.32	<1
Total	2.32	<1

### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



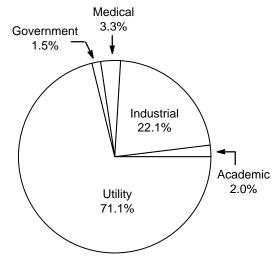


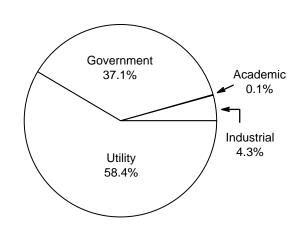
### NEW YORK Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

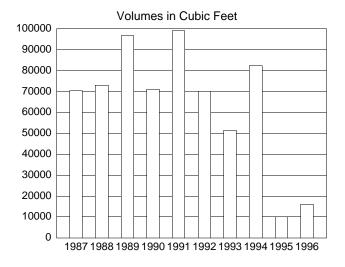
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	329.76	2.00
Government	246.70	486.57
Industrial	3,587.39	56.30
Medical	525.22	.76
Utility	11,539.32	766.74
Total	16,228.39	1,312.36

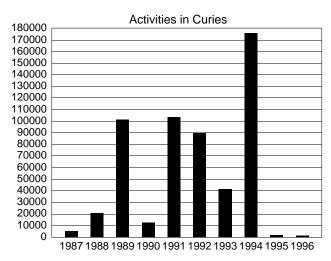
### **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







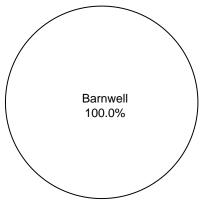


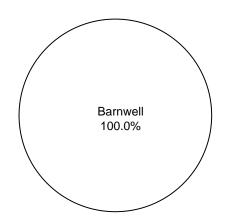
### **NEW YORK Low-Level Radioactive Wastes Received** at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	16,228.39	1,312.36
Total	16,228.39	1,312.36

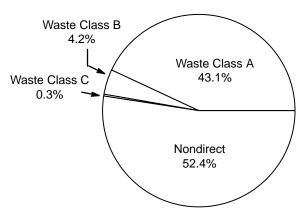
### **VOLUME PERCENTAGE BY DISPOSAL SITE** (Percentages <.1% are not displayed)

**ACTIVITY PERCENTAGE BY DISPOSAL SITE** (Percentages <.1% are not displayed)





Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	6,994.80
В	677.10
C	57.40
Total	7,729.30
Nondirect Shipments	8,499.09
Total Volume	16,228.39
Total Activity (curies)	1,312.36

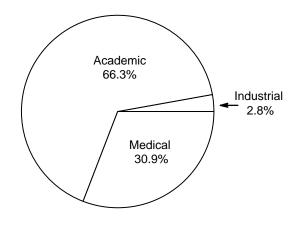


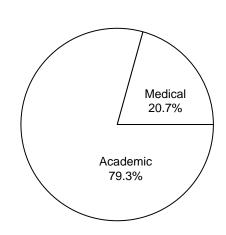
### RHODE ISLAND Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

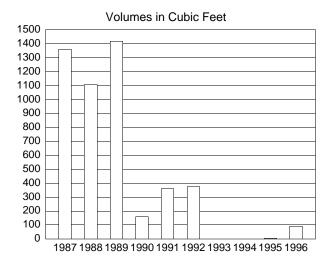
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	60.42	.23
Industrial	2.51	<.01
Medical	28.20	.06
Total	91.13	.29

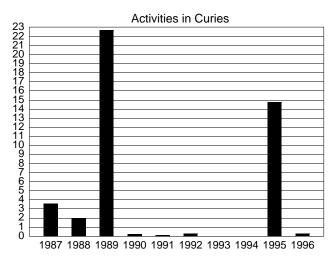
**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)









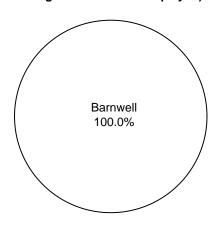
### RHODE ISLAND Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

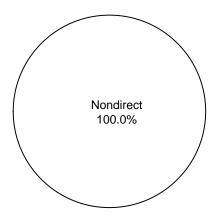
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	91.13	.29
Total	91.13	.29

### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



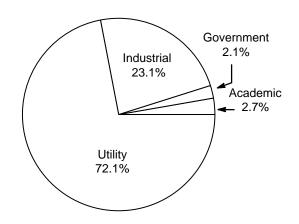


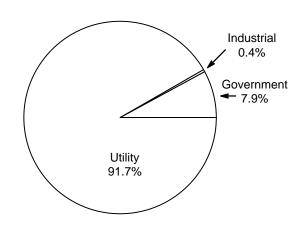
### SOUTH CAROLINA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

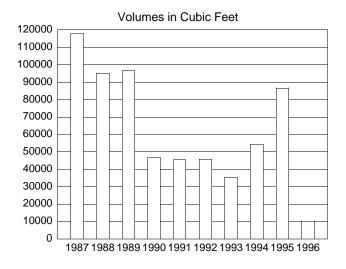
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	272.00	.89
Government	215.90	184.42
Industrial	2,374.14	8.57
Utility	7,411.06	2,153.25
Total	10,273.10	2,347.13

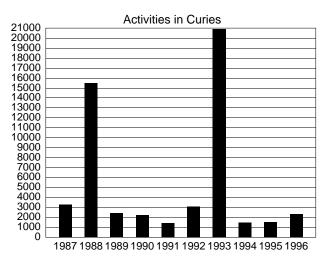
**VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





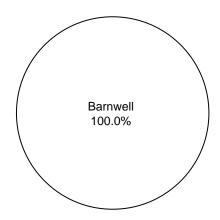




### SOUTH CAROLINA Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

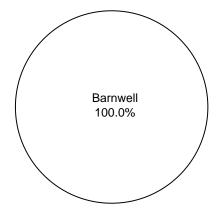
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	10,273.10	2,347.13
Total	10,273.10	2,347.13

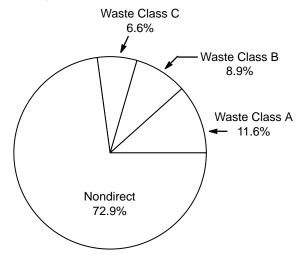
### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



Direct Shipment Waste Class	Volume (ft <sup>3</sup> )
A	1,188.10
В	918.80
C	679.50
Total	2,786.40
Nondirect Shipments	7,486.70
Total Volume	10,273.10
Total Activity (curies)	2,347.13

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



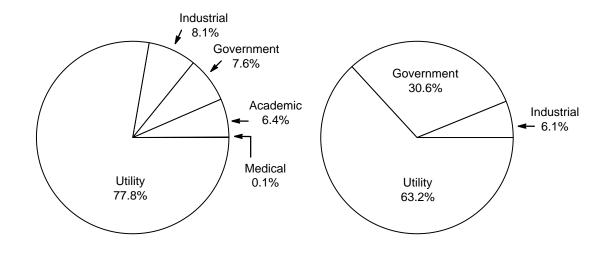


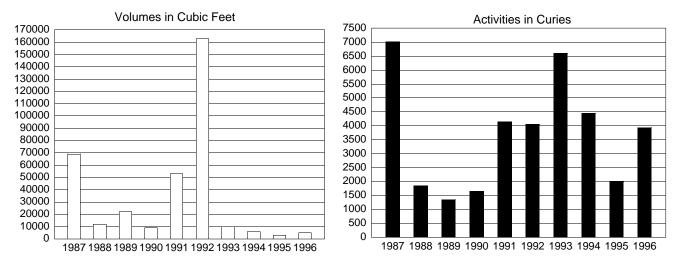
TEXAS
Low-Level Radioactive Wastes Received
at Commercial Disposal Sites in 1996

Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Academic	311.76	1.56
Government	371.40	1,207.79
Industrial	396.38	240.82
Medical	3.59	.10
Utility	3,803.47	2,491.19
Total	4,886.60	3,941.45

### **VOLUME PERCENTAGE BY SOURCE** (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)





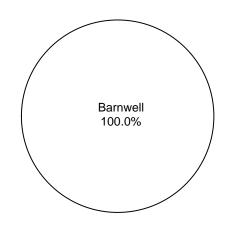
TEXAS
Low-Level Radioactive Wastes Received
at Commercial Disposal Sites in 1996

Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	4,886.60	3,941.45
Total	4,886.60	3,941.45

### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

# Barnwell 100.0%

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



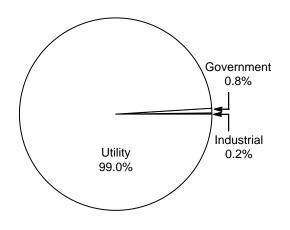
Direct Shipment Waste Class	Volume (ft <sup>3</sup> ) Waste Class C 11.1% Wa	Waste Class A 8.2% ste Class B
A	401.00	26.7%
В	1,305.70	
C	543.70	
Total	2,250.40	
Nondirect Shipments	2,636.20	londirect 54.0%
Total Volume	4,886.60	34.0 /
Total Activity (curies)	3,941.45	

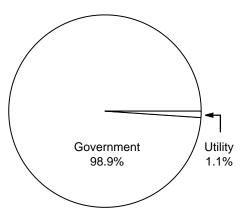
VERMONT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

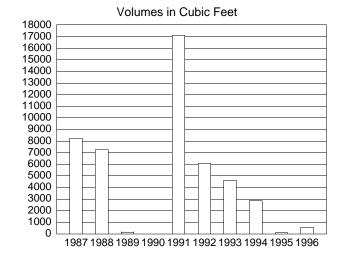
Generator Category	Volume (ft <sup>3</sup> )	Activity (curies)
Government	4.60	45.27
Industrial	1.10	<.01
Utility	556.90	.50
Total	562.60	45.77

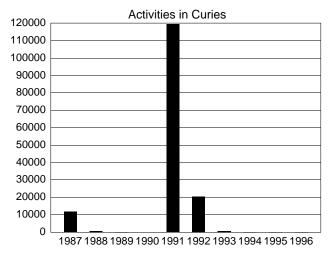
### VOLUME PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY SOURCE (Percentages <.1% are not displayed)







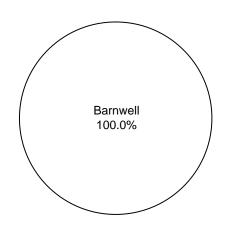


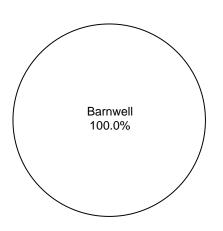
### VERMONT Low-Level Radioactive Wastes Received at Commercial Disposal Sites in 1996

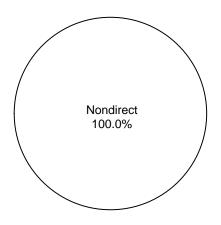
Disposal Site	Volume (ft <sup>3</sup> )	Activity (curies)
Barnwell	562.60	45.77
Total	562.60	45.77

### VOLUME PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)

### ACTIVITY PERCENTAGE BY DISPOSAL SITE (Percentages <.1% are not displayed)



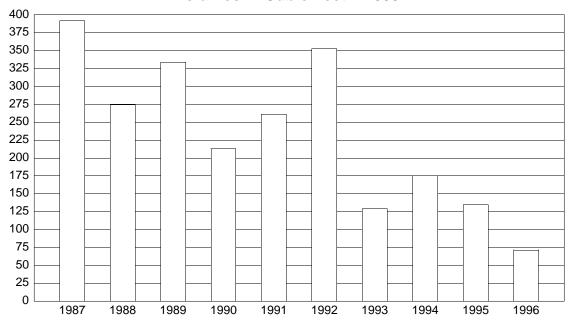




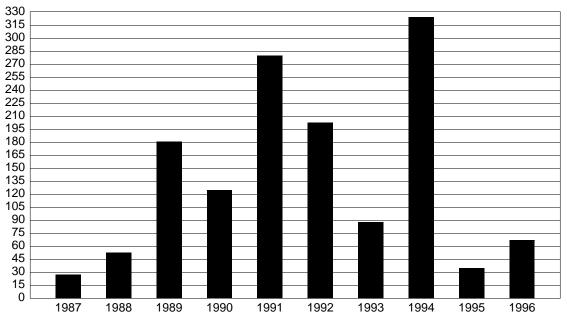
### UNAFFILIATED STATES Comparison By Year

NOTE: The years 1987 through 1996 include all states currently being reported as unaffiliated states.

### **Volumes in Cubic Feet x 1000**



### **Activities in Curies x 1000**



### **APPENDIX B**

WASTE VOLUME COMPARISON BY STATE, RADIOACTIVITY COMPARISON BY STATE, AND COMMERCIAL NUCLEAR POWER REACTORS IN THE UNITED STATES

**Table B-1.** Waste volume comparison by state, 1992-1996, as reported by disposal site operators.

	Volume (ft <sup>3</sup> )				
State	1992	1993	1994	1995	1996
Alabama	20,351	13,077	14,194	14,056	9,267
Alaska	143	447	44	0	10
Arizona	19,001	8,153	8,300	<1	9,329
Arkansas	6,497	2,890	6,258	1,943	571
Army Out U.S.	445	2,506	6,716	300	66
California	112,946	19,804	47,458	11,521	12,071
Colorado	33,863	38,659	17,589	68,988	4,672
Connecticut	53,032	14,602	12,737	6,216	10,871
Delaware	988	500	375	58	127
District of Columbia	1,598	<1	562	130	165
Florida	23,535	12,527	11,977	6,136	6,220
Georgia	29,344	13,232	19,428	18,327	13,406
Hawaii	2,932	2,361	1,900	2,634	1,572
Idaho	51	324	27	1,460	0
Illinois	285,023	66,515	61,224	57,762	51,771
Indiana	2,733	967	1,623	101	329
Iowa	5,448	2,007	3,179	2,058	3,639
Kansas	8,196	2,726	1,981	926	1,185
Kentucky	2,195	468	333	91	442
Louisiana	24,744	7,161	15,632	6,768	5,378
Maine	8,789	0	2,940	2,808	3,499
Maryland	17,854	11,364	8,421	4,429	3,391
Massachusetts	56,734	24,964	19,486	10,978	10,756
Michigan	0	0	0	20,459	24,951
Minnesota	40,194	5,057	1,932	2,467	3,215
Mississippi	12,623	7,372	7,128	10,030	5,601
Missouri	11,315	3,189	5,897	1,423	2,917
Montana	140	0	10	8	0
Nebraska	12,617	11,768	2,634	2,385	5,013
Nevada	134	0	280	76	118
New Hampshire	48	0	0	9	2
New Jersey	38,032	21,077	22,501	14,184	15,805
New Mexico	3,483	12	402	891	50
New York	70,272	51,623	82,583	10,114	16,228
North Carolina	61,777	37,028	30,707	25,011	0

 Table B-1. (continued).

			Volume (ft <sup>3</sup> )		
State	1992	1993	1994	1995	1996
North Dakota	99	4	61	0	4
Ohio	22,207	6,677	11,668	8,822	7,091
Oklahoma	28,062	195	467	138	152
Oregon	147,682	99,828	32,179	74,820	52,082
Pennsylvania	93,050	48,624	51,465	35,200	24,203
Puerto Rico	0	0	0	0	0
Rhode Island	374	0	0	6	91
South Carolina	45,782	35,476	54,544	86,775	10,273
South Dakota	1,712	9	5	246	0
Tennessee	83,792	84,658	154,301	78,810	41,313
Texas	162,844	9,801	5,880	2,935	4,887
Utah	5,380	6,524	5,849	4,498	4,925
Vermont	6,090	4,633	2,863	120	563
Virginia	92,747	72,522	50,498	40,130	17,663
Washington	79,290	38,593	66,259	51,606	33,696
West Virginia	192	27	82	4	35
Wisconsin	6,896	2,225	5,892	1,051	2,397
Wyoming	3	0	206	53	1
Total	1,743,279	792,177	858,677	689,957	422,013

**Table B-2.** Waste radioactivity comparison by state, 1992-1996, as reported by disposal site operators.

		R	Radioactivity (ci)		
State	1992	1993	1994	1995	1996
Alabama	53,669	67,949	9,034	78,340	22,281
Alaska	568	<1	5	0	603
Arizona	997	680	453	0	16
Arkansas	32,562	4,860	473	8	303
Army Out U.S.	4	20	1,056	2,914	133
California	15,730	10,914	23,132	409	3,475
Colorado	32,978	30,007	4,521	553	77
Connecticut	29,392	5,378	889	841	3,088
Delaware	1	45	69	<1	6
District of Columbia	31	<1	345	<1	1
Florida	996	13,052	3,280	2,444	1,418
Georgia	40,312	218,851	167,310	13,798	122,520
Hawaii	3	3	50	1,821	1
Idaho	2	2	94	<1	0
Illinois	103,273	37,718	32,136	7,044	57,329
Indiana	27	7	129	36	10
Iowa	42,085	51,342	1,633	209	552
Kansas	1,319	1,440	2,297	398	3,996
Kentucky	26	510	285	20	462
Louisiana	4,683	255	1,878	13,244	799
Maine	8,110	0	17	78	477
Maryland	8,421	5,019	1,440	346	349
Massachusetts	76,588	18,012	141,110	24,903	16,628
Michigan	0	0	0	1,438	41,907
Minnesota	59,979	1,450	1,739	365	1,406
Mississippi	2,669	493	660	1,543	2,818
Missouri	1,128	444	1,200	183	150
Montana	7	0	<1	0	0
Nebraska	101,284	1,063	992	407	32,751
Nevada	18	0	4	<1	2
New Hampshire	1	0	0	0	<1
New Jersey	47,959	8,587	5,727	996	907
New Mexico	56	<1	6	2	4
New York	90,377	41,643	175,843	1,951	1,312
North Carolina	57,505	2,502	68,213	3,310	0

 Table B-2. (continued).

		R	Cadioactivity (ci)		
State	1992	1993	1994	1995	1996
North Dakota	67	18	6	0	<1
Ohio	3,440	2,370	583	553	50,021
Oklahoma	60	623	64	<1	<1
Oregon	742	331	48	1,279	357
Pennsylvania	141,248	84,347	93,730	5,692	71,901
Puerto Rico	0	0	0	0	0
Rhode Island	<1	0	0	15	<1
South Carolina	3,088	20,943	1,476	1,504	2,347
South Dakota	<1	<1	7	<1	0
Tennessee	1,595	243	194	777	645
Texas	4,057	6,605	4,462	2,010	3,941
Utah	108	<1	80	22	<1
Vermont	20,513	740	158	135	46
Virginia	1,154	3,305	2,402	951	10,375
Washington	10,663	1,078	1,264	923	631
West Virginia	31	6	<1	5	<1
Wisconsin	571	345	879	348	153
Wyoming	5	0	6	<1	13
Total	1,000,102	643,207	751,379	171,816	456,211

**Table B-3.** Commercial nuclear power reactors in the United States, as of December 31, 1996.

State Name	Facility Name	Units	Type
Alabama	<ul><li>Browns Ferry Nuclear Power Station</li><li>Joseph M. Farley Nuclear Plant</li></ul>	1,2&3 1&2	BWR <sup>b</sup> PWR <sup>c</sup>
Arizona	Palo Verde Nuclear Generating Station	1,2&3	PWR
Arkansas	Arkansas Nuclear One	1&2	PWR
California	<ul> <li>Diablo Canyon Nuclear Power Plant</li> <li>Humboldt Bay Power Plant (closed 1976)</li> <li>Rancho Seco Nuclear Generating Station (closed 1989)</li> </ul>	1&2	PWR BWR PWR
	<ul> <li>San Onofre Nuclear Generating Station (Unit 1 closed 1992)</li> </ul>	2&3	PWR
Colorado	• Ft. St. Vrain Nuclear Generating Station (closed 1989)		HTGR <sup>d</sup>
Connecticut	<ul> <li>Haddam Neck Plant (closed 7/22/1996)</li> <li>Millstone Nuclear Power Station</li> <li>Millstone Nuclear Power Station</li> </ul>	1 2&3	PWR BWR PWR
Florida	<ul><li>Crystal River Nuclear Plant</li><li>St. Lucie Plant</li><li>Turkey Point Plant</li></ul>	3 1&2 3&4	PWR PWR PWR
Georgia	<ul><li>Edwin I. Hatch Nuclear Plant</li><li>Alvin W. Vogtle Jr. Nuclear Plant</li></ul>	1&2 1&2	BWR PWR
Illinois	<ul> <li>Byron Nuclear Power Station</li> <li>Clinton Power Station</li> <li>Dresden Nuclear Power Station (Unit 1 closed 1978)</li> <li>LaSalle County Station</li> <li>Quad Cities Station</li> <li>Zion Nuclear Plant</li> <li>Braidwood Station</li> </ul>	1&2 1 2&3 1&2 1&2 1&2 1&2	PWR BWR BWR BWR PWR
Iowa	Duane Arnold Energy Center	1	BWR
Kansas	Wolf Creek Generating Station	1	PWR
Louisiana	<ul><li>River Bend Station</li><li>Waterford Generating Station</li></ul>	1 3	BWR PWR

 Table B-3. (continued).

State Name	Facility Name	Units	Type
Maine	Maine Yankee Atomic Power Plant	1	PWR
Maryland	Calvert Cliffs Nuclear Power Plant	1&2	PWR
Massachusetts	<ul><li>Pilgrim Nuclear Power Station</li><li>Yankee Nuclear Power Station (closed 1991)</li></ul>	1	BWR PWR
Michigan	<ul> <li>Big Rock Point Nuclear Plant</li> <li>Donald C. Cook Nuclear Power Plant</li> <li>Fermi Atomic Power Plant</li> <li>Palisades Nuclear Plant</li> </ul>	1 1&2 2 1	BWR PWR BWR PWR
Minnesota	<ul><li> Monticello Nuclear Generating Plant</li><li> Prairie Island Nuclear Generating Plant</li></ul>	1 1&2	BWR PWR
Mississippi	Grand Gulf Nuclear Station	1	BWR
Missouri	Callaway Plant	1	PWR
Nebraska	<ul><li>Cooper Nuclear Station</li><li>Fort Calhoun Station</li></ul>	1 1	BWR PWR
New Hampshire	Seabrook Nuclear Station	1	PWR
New Jersey	<ul> <li>Hope Creek Nuclear Generating Station</li> <li>Oyster Creek Nuclear Power Plant</li> <li>Salem Nuclear Generating Station</li> </ul>	1 1 1&2	BWR BWR PWR
New York	<ul> <li>James A. FitzPatrick Nuclear Power Plant</li> <li>Robert Emmett Ginna Nuclear Power Plant</li> <li>Indian Point Station (Unit 1 closed 1974)</li> <li>Nine Mile Point Nuclear Station</li> <li>Shoreham Nuclear Power Station (closed 1989)</li> </ul>	1 1 2&3 1&2	BWR PWR PWR BWR BWR
North Carolina	<ul> <li>Brunswick Steam Electric Plant</li> <li>McGuire Nuclear Station</li> <li>Shearon Harris Nuclear Power Plant</li> </ul>	1&2 1&2 1	BWR PWR PWR
Ohio	<ul><li>Davis-Besse Nuclear Power Station</li><li>Perry Nuclear Power Plant</li></ul>	1 1	PWR BWR
Oregon	• Trojan Nuclear Plant (closed 1992)		PWR

 Table B-3. (continued).

State Name	Facility Name	Units	Type
Pennsylvania	<ul> <li>Beaver Valley Power Station</li> <li>Limerick Generating Station</li> <li>Peach Bottom Atomic Power Station</li> <li>Susquehanna Steam Electric Station</li> <li>Three Mile Island Nuclear Station</li> </ul>	1&2 1&2 2&3 1&2	PWR BWR BWR BWR PWR
South Carolina	<ul> <li>Catawba Nuclear Station</li> <li>Oconee Nuclear Plant</li> <li>H. B. Robinson Plant</li> <li>Virgil C. Summer Nuclear Station</li> </ul>	1&2 1,2,&3 2 1	PWR PWR PWR PWR
Tennessee	<ul><li>Sequoyah Nuclear Plant</li><li>Watts Bar Nuclear Plant</li></ul>	1&2 1	PWR PWR
Texas	<ul><li>South Texas Project</li><li>Comanche Peak</li></ul>	1&2 1&2	PWR PWR
Vermont	• Vermont Yankee Nuclear Power Station	1	BWR
Virginia	<ul><li>North Anna Power Station</li><li>Surry Power Station</li></ul>	1&2 1&2	PWR PWR
Washington	Washington Nuclear Project	2	BWR
Wisconsin	<ul> <li>Kewaunee Nuclear Power Plant</li> <li>La Crosse Nuclear Generating Station (closed 1987)</li> </ul>	1	PWR BWR
	<ul> <li>Point Beach Nuclear Plant</li> </ul>	1&2	PWR

a. "World List of Nuclear Power Plants," Nuclear News, March, 1997/Vol. 40/No.3.

b. BWR = Boiling-Water Reactor.

c. PWR = Pressurized-Water Reactor.

d. HTGR = High Temperature Gas Reactor.

# APPENDIX C STATE RADIATION PROGRAM

**REPRESENTATIVES** 

**Table C-1.** State radiation program representatives.

State	Draft Report Sent to:
Alabama	K. E. Whatley
Alaska	C. F. Tedford
Arizona	A. V. Godwin
Arkansas	G. J. Dicus
California	E. D. Bailey
Colorado	R. M. Quillin
Connecticut	K. T. A. McCarthy
Delaware	A. C. Tapert
District of Columbia	J. Murphy
Florida	L. Jerrett
Georgia	T. E. Hill
Hawaii	R. S. Takata
Idaho	M. Mays
Illinois	P. Eastvold
Indiana	D. Nauth
Iowa	D. A. Flater
Kansas	G. W. Allen
Kentucky	J. A. Volpe
Louisiana	W. Spell
Maine	W. C. Toppan
Maryland	R. G. Fletcher
Massachusetts	R. Hallisey
Michigan	G. W. Bruchmann
Minnesota	J. Ball
Mississippi	E. S. Fuente
Missouri	G. McNutt
Montana	A. C. Howe
Nebraska	H. R. Borchert
Nevada	S. R. Marshall
New Hampshire	D. E. Tefft
New Jersey	J. Lipoti
New Mexico	B. Garcia
New York	P. J. Merges
North Carolina	D. H. Brown
North Dakota	D. K. Mount
Ohio	R. E. Owen
Oklahoma	D. McHard

 Table C-1. (continued).

State	Draft Report Sent to
Oregon	R. D. Paris
Pennsylvania	W. P. Dornsife
Puerto Rico	D. Saldana
Rhode Island	M. Stoeckel
South Carolina	M. Batavia
South Dakota	D. Micklos
Tennessee	M. H. Mobley
Texas	R. Ratliff
Utah	W. Sinclair
Vermont	R. N. McCandless
Virginia	L. P. Foldesi
Washington	T. R. Strong
West Virginia	B. L. DeBord
Wisconsin	P. Schmidt
Wyoming	R. Fransen